GUIDE TO THE RY3 KAMCHADAL FILE

[The RY3 file is concerned with the Kamchadal or Italmen of the Kamchatka Peninsula in northeastern Siberia. According to 6: Antropova, the name Italmen should be used to refer to the natives of Kamchatka peninsula. Kamchadal refers to the mixed population of Italmens who have adopted many Russian customs and the Russians who have married Italmens and have become "Italmenized." Italmen culture no longer exists. It has been completely eradicated by two and a half centuries of Russian administration and mixture. Reconstructions of their culture have however been made on the basis of early reports. Italmens spoke a language related to Chuckchi and Koryak, of the Paleo-Asistic stock. Before Russian contact in the late 17th century, the population has been estimated to have been about 30,000. Although there were 4,217 Kamchadals in the 1926 census, only 868 of them could speak their native language. In the early 18th century, the Italmens were scattered all over the Peninsula with the greatest concentration in the valley of the Kamchatka River. Russian interest was initially in furs and they exploited the natives. This led to rebellions which together with epidemics reduced and weakened the population. Larger villages were formed with the remnants of various clans. These villages were ruled by elders who were approved by the Russian administration. The primary economic activity was fishing and secondarily the hunting of sea mammals. The Russians have tried to introduce horse and cattle herding and agriculture, but this has never been successful to any large extent. Shamanism was practiced aboriginally, but apparently not to the extent that it was among some of the neighboring peoples. The Italmens were converted to Christianity in the 18th century.

There are eleven sources in the RY3 file. These sources are either reports of early explorers and travelers or are reconstructions based on these reports. The basic source is 1: Krasheninnikov. Krasheninnikov was a member of an expedition of natural scientists sent by the Russian government in 1733 to explore Siberia and Kamchatka. It is an excellent report and forms the basis of contemporary knowledge about aboriginal Italmen customs. 7: Lesseps is based on a voyage in 1787-1788 by the interpreter for La Pérouse. It contains data on the Russian administration and various other topics. 27: Sauer was written by a member of the Billings expedition in 1789-1793 but the source contains mostly geographical data. Sarytschew was also a member of the Billings expedition, and source 28 contains a few ethnographic tidbits from his report. 29: Cochrane, who visited Kamchatka in 1821-1822 and married an Italmen woman, is primarily concerned with Russian abuse of the natives. Sources 22 and 24 were also written during the 19th century and contain scattered bits of ethnographic information. 5: Jochelson is a report on archeological excavations in Kamchatka; 17: Heizer is a brief discussion of the use of aconite poison in whale hunting based on secondary data; and 18: Yarmolinsky is an edited version of three folktales recorded by Jochelson in 1910. 6: Antropova is a brief overview of aboriginal Italmen culture based mainly on Krasheninnikov. It also contains brief data on the changes in Kamchadal life since Sovietization. It is recommended for a brief introductory cultural summary. The file's main value is its early and reliable reports, primarily Krasheninnikov. Since the sources in this file cover a period of over two centuries from early contact to modern times, it would be excellent for a researcher of acculturation and culture contact. It would be invaluable for a student of colonial administration of native peoples, particularly since the administration was non-Western. Some of the file pages lack the standard OWC codes and are in the typed format. The file was processed between 1952 and 1968.]

1: Krasheninnikov N-5 (1736-40) 1764 RYJ Kamchadal RYJ

133 es out of the *Eolipile*, and is so hot that the hand cannot bear it. After passing through a very woody and mountainous country, we come to the remarkable stream *Krodakighe*, or the Larch-Tree River, which rushes out of the great lake *Kronotzkoy*, in such a cascade that one may walk under it: this lake is in length about 50 versts, reckoned to be 40 in breadth, and is near 50 from the sea. Around it are high mountains, two of which about the sides of the upper mouth of the rivulet *Krodakighe*, rise above the rest. Multitudes of rivulets empty themselves into the lake *Kronotzkoy*, whose springs are near those rivers which run into the *Kamtschatka*.

101 133 From this place, nothing worth remarking occurs 'till we come to the *Kronotzkoy* Noss; and here begins the Beaver Sea, which extends to the *Shupinskoy*. The coast from the *Kamtschatka* to the *Kronotzkoy* Noss is every where sandy; and near the bay, called *Ukinskaya*, begin the habitations of the settled *Koreki*; but the *Kamtschadales* inhabit all the country to this place.[1]

103 The river *Nungeen*, which falls into *Nutrenoi* bay, is called, by the Cossacks, *Pankara*, because there was formerly on the south side of the bay a small *Koreki* fort of the same name; but the inhabitants having built a small fort on a high hill on the northern side of the bay, which they called *Gengota*, abandoned it: this fort is surrounded with a wall of earth about 000 a fathom high, and a yard thick, having within it a double pallisade, and on each side are two bastions raised. It has three gates to the east, west, and north. The *Koreki* purpose to leave their old fort, and to remove into the new one, which they have built about the inward point of the above-mentioned bay, and call it *Ueackang-Atenum*: this was the first place that I found fortified by the natives; for the others were nothing more than habitations dug in the earth, surrounded with huts, as with so many towers without any outward fortifications;

1 [all the country south of Ukinskaya Bay]

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fications; but, on the contrary, further to the north, there is 000
not one ſettlement of theſe people which has not, beſides its natural ſtrength of ſituation, a wall to cover it. The *Koreki* in thoſe places ſay, that they thus provide for their defence againſt the incurſion of the *Tchukotskoi:* but as that people have never invaded theſe places, ſome other cauſe muſt be ſought for this precaution of the *Koreki*; and we can account for it only from their apprehenſions of the Coſſacks, who uſually travel this way.

Upon the north point of a bay which receives the *Kitkitannu*, 133
a rivulet, there is a ſmall fort built on a high rock, and fortified by a wall of earth about 10 feet in height. Its gates are on the eaſt and ſouth ſides. The inhabitants of it are under the commander of the ſmall fort *Keemgu*, whom the Coſſacks call a *Ruſſian*, he being of that extraction. From this fort there is a low cape that projects into the ſea; beyond this cape there is a deep bay of about eight verſts in breadth, and equally as broad at its mouth as in the middle; but all the reſt of the bays which I have ſeen are narrow at their mouths. Into this bay the river *Karaga* enters by two mouths, and almoſt meets near its head with the *Leſnaya* river, to which they uſually go from the *Karaga*. On the north ſhore of the bay there ſtands, on a high hill, the ſmall fort *Keetalgeen*, in which every hut is inclosed with a paliſade. Beſides this ſmall fort on the river *Karaga*, there are two other ſettlements of the *Koreki*. Overagainſt the mouth of the *Karaga*, 20 verſts from the ſhore, is an iſland, called *Karaginſkoy*, the lower end of which is oppo-
ſite to *Nungeen*, and the upper end to *Kute* cape. *Koreki* in- 101
habit this iſland; but thoſe on the continent do not allow them to be of the ſame race with themſelves; and it muſt be obſerved, that the manners of the *Karaginſkoy* appear as barbarous to the *Koreki*, as thoſe of the *Koreki* do to more
civilized nations.

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The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn-wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſhed

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177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

101 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and vo-
651 luntarily pay a tribute in beavers and foxes. The author concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

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/33 The twelfth iſland *Shockoeki* lies on the ſouth ſide, and ſo diſtant from the *Sujaskutan*, that they can hardly row to it in half a day, even when the days are longeſt, in the lighteſt boat. It is ſaid, that the *Japaneſe* carry ore from it in large veſſels; but what ore is not known. The thirteenth iſland, and the following to the ſeventeenth, are called *Motogo*, *Shatovo*, *Utitir*, *Kituy*, and *Shimutir*. The *Utitir* lies ſomewhat to the eaſt, and the reſt in one line ſouth. The channels are croſſed in light boats, in leſs than half a day, but the paſſage is exceſſively difficult, becauſe the tide runs very rapid in all of them; and, when it happens to be a ſide wind, theſe ſmall veſſels are driven into the ſea, and loſt; and for this reaſon the inhabitants of all theſe iſlands paſs and repaſs theſe places early in the ſpring in calm weather. The *Motogo*, *Shatovo*, and the *Utitir* iſlands have nothing remarkable in them. On the iſland *Kituy* grow the
/61 reeds of which they make their arrows. The *Shimatir* is larger than the reſt, and has many people on it, who reſemble the *Kuriles* of the firſt three iſlands in all reſpects, but are not under the *Ruſſian* government, nor any other foreign power. The navigators who were ſent by *Peter the Great*, only ſaw this iſland, beyond which no *Ruſſians* ever were until the ſecond *Kamtſchatkoi* expedition.

/33 The *Cheerpuy* is reckoned the eighteenth of the iſlands. It lies weſt at the mouth of the channel. On this is a very high mountain, but no inhabitants. Some people come there from the other iſlands to catch fowls and dig roots. The people of *Kituy* have ſometimes heard firing of cannon on this iſland, as they relate, but on what account they know not. They likewiſe report, that formerly a *Japaneſe* veſſel was loſt upon it, whoſe people were taken by the inhabitants of the next iſland, and were ſent to *Japan* to be redeemed.

000 The channel which divides the iſland *Shimutir* from the nineteenth iſland *Eturpu* is ſo broad, that one cannot ſee one iſland

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island from the other; but from thence to the twentieth island *Urupe*, and from that again to the twenty-first *Kunatir*, the channels are much narrower.

The twenty-second and the last island near *Japan* the *Japanese* used to call *Matma*, but how broad the channel is between that and the former island *Kunatir* is not mentioned in Mr. *Muller*'s account; but one may judge that it is not very wide, especially to the west, for reasons to be given hereafter. The island *Matma* is larger than any of the rest, and next to it in size is the *Kunatir*.

The natives of the *Eturpu* and the *Urupe* islands call themselves *Keek-Kuriles*. They have a particular language of their own, and resemble the natives of the island *Kunatir*, but we do not know whether their language is the same or not; neither are we assured whether the language of the *Keek-Kuriles* has any affinity with that of the *Kuriles* of *Kamtschatka* and the islands near it. This is to be observed that the *Japanese* say they call the natives of the last four islands by the common name of *Jesso*; from which we may conclude that the inhabitants of *Matma* are of the same race with the natives of the former islands, and the language is the same on all these four islands. Thus we may correct the errors of former geographers, who give the name of *Jesso* to a large country lying north-east of *Japan*, which now we find is made up of the above-mentioned islands. In this there is nothing contrary to the accounts that we meet with in the voyages of the *Europeans*, particularly of the *Dutch*, who in the year 1643 were sent to discover the land of *Jesso*. Some of the inhabitants of the islands of *Eturpu* and *Urupe* (which had a commerce with the natives of the islands near *Kamtschatka*, about 25 or 30 years ago) were taken captives on the island *Paromusir*, and were brought to *Kamtschatka*; and this probably put an end to their communication and traffick by sea. However these captives were useful; for the accounts received from the *Japanese* were explained

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plained and corrected by them, and ſome new information obtained. According to them thoſe *Keek-Kuriles* on the iſlands *Eturpu* and *Urupe* are under no foreign ſubjection; but *Matma*, both by the account of *European* travellers and of the *Japaneſe*, has been for many years ſubject to *Japan*. They ſay alſo, that upon theſe iſlands are a great number of the *Kuriles* and *Kamtſchadales* in ſlavery, who had been formerly carried off. It is worthy of obſervation throughout all theſe iſlands, that ſuch as lie more weſternly have no wood, but thoſe that lie to the eaſtward have it in abundance, and conſequently there is great plenty of game. There is ſafe anchoring in the mouths of the rivers for large ſhips, in the iſland *Eturpu* particularly. The *Japan* ſilk, cotton ſtuffs, and all ſorts of iron houſhold furniture alſo, are brought to the iſlands *Eturpu* and *Urupe* by the natives of *Kunatir*, who purchaſe them from the inhabitants of *Matma*.

The inhabitants of *Eturpu* and *Urupe* make ſtuffs of nettles, which they ſell to the *Japaneſe*: they likewiſe ſell to them all ſorts of furrs, which they have among themſelves, and which are brought to them from the iſlands near *Kamtſchatka*; alſo dry fiſh and whale's fat, which is uſed in victuals by the natives of the iſland *Matma*. By the accounts of travellers, theſe things are carried even into *Japan*.

The iſland *Matma* lies from the ſouth-weſt to the north-eaſt. The *Japaneſe* have a ſtrong guard upon its ſouth-weſt point, perhaps with a view to defend the country from the *Chineſe* and *Koreans*. Not far from thence, upon the ſhore of the channel, which divides the iſland *Matma* from *Japan*, ſtands a *Japaneſe* city of the ſame name with the iſland, where are kept all ſorts of ammunition, muſkets, and guns for defence, and in which where lately built new fortifications. Moſt of the *Japaneſe* ſettlements upon *Matma* were made by people baniſhed thither. The *Japaneſe*, who were brought to *Kamptſchatka*, give us the ſame accounts of the channel between *Matma* and *Japan*, which

we

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there are plenty. They acknowledge no ſovereign, though they live near *Japan*. The *Japaneſe* come to them every year in their ſmall craft, and bring all ſorts of iron ware, brazen pots, wooden lackered waiters and bowls, leaf of tobacco, and ſilk-and-cotton ſtuffs, which they exchange with them for whales' fat and the ſkins of foxes; but they are not ſo good as thoſe of *Kamtſchatka*. The natives of the iſland of *Kunatir* told the *Ruſſians* to beware of thoſe of the iſland of *Matma*, becauſe they had cannon, aſking our people at the ſame time, whether they came from the North, and if they were thoſe who are famous for their armies, and able to wage war with, and conquer, every nation. The language of the iſland *Kunatir* is almoſt the ſame with that ſpoken in the iſland *Paromuſir*: from hence we may conclude, that the natives of *Eturpu* and *Urupe* differ little in their language from the *Kurilſki*. The inhabitants of theſe iſlands are ſaid to call themſelves *Keek-Kuriles*; but the word *Kuriles* being corruptly uſed by the *Coſſacks* for the word *Kuſhi*, (which is a common name for the natives of the *Kurilſki* iſlands) it is more probable, that, if the natives of *Eturpu* and *Uturpe* do diſtinguiſh themſelves by the addition of the word *Keek*, they are called *Keek-Kuſhi*, and not *Keek-Kuriles*.

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101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

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both in their language and cuſtoms, yet we have reaſon to believe 101
they are the ſame people; the difference only arifing from their 177
neighbourhood, and intermarriages with the true *Kuriles*. 184

The *Kamtſchadales* have this particular cuſtom, that they endeavour to give every thing a name in their language which may 192
expreſs the property of it; but if they don't underſtand the thing quite well themſelves, then they take a name from ſome foreign language, which perhaps has no relation to the thing itſelf; as, for example, they call a prieſt *Bogbog*, becauſe probably they hear him uſe the word *Bogbog*, God; bread they call *Brigbtatin Augſh*, that is, *Ruſſian* root; and thus of ſeveral other words to which their language is a ſtranger.

The names which the *Ruſſians* give theſe different nations they 161
did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtſchadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language ſignifies a rein-deer; and that the *Ruſſian* Coſſacks frequently hearing the word *Kora*, or obſerving that their whole riches conſiſted in rein-deer, gave them the name of *Koreki*.

The inhabitants of *Kamtſchatka* have three languages, that 197
of the *Kamtſchadales*, the *Koreki*, and *Kuriles*; each of which is 177
divided into different dialects. The *Kamtſchatka* language has three principal dialects: the firſt is uſed by the northern, the ſecond by the ſouthern, which differ ſo much that one may look upon them as different languages; however they can underſtand one another without any interpreter: the third dialect is that which is ſpoken by thoſe who live upon the *Penſchinſka* ſea, between the rivers *Vorovſkaya* and *Tegbil*, which is compoſed of both the above-mentioned dialects and ſome words taken from the *Koreki*.

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000 The language of the *Kereki* consists of two dialects; one of which is spoken by the rein-deer *Kereki*, and the other by the fixed. We are not, indeed, certain what other dialects may be amongst them, being well acquainted only with those who are subject to the *Russians*; but it is probable that those who are 191 scattered among the islands may have some difference in their way of speaking. The *Kamtschatka* language is spoken half in the throat and half in the mouth: the pronunciation is slow and difficult, and seems to indicate a timorous, slavish, and deceitful people; as in fact they are.

The *Kereki* speak aloud, and in a screaming tone; their words are long, but their sentences short, and their words generally begin with two vowels, and end with one or two more: as for example, uemkai, a rein-deer which has not been driven.

The *Kuriles* speak slow, distinctly, and agreeably: their words are middling, the vowels and consonants being justly mixed: and of all these wild people the *Kuriles* are the best, being honest, constant, civil, and hospitable.

CHAP. II.

161 *Some Conjectures concerning the Names of the* Kamtschadales, *and the other Inhabitants of* Kamtschatka.

SOME assert, that the *Kamtschadales* were so named by the *Russians* from the river *Kamtschatka*, but it was called so before the *Russians* had discovered it, and had its name from a chieftain, called *Konchata*.

We cannot find likewise why the *Kereki* call the *Kamtschadales*, *Kontchalo*, nor can they give any reasons for it themselves.

The

The *Kamtſchadales*, beſides the general name *Itelmen*, diſtin- 101
guiſh themſelves by adding the name of the river, or remarkable place where they live, as *Kikſha-ai*, an inhabitant upon the Great River; *Suatchu-ai*, an inhabitant upon the river *Awatſcha*; for the word *ai* being added to any river or remarkable ſituation, denotes inhabitant of that place, as the word *Itelmen* is the general name for inhabitant. Thoſe who think *Konchata* to have been a great captain, ſeem to have applied to him only all the brave actions which ought to be attributed to the ſeveral inhabitants upon the river *Elouki*, who are called *Koatche-ai*, or, in the common way of ſpeaking, *Kontchat*: beſides, this being a received opinion, that the inhabitants of the river *Elouki* are the braveſt of all the *Kamtſchadales*, the *Koreki*, who are their neighbours, might eaſily call the whole nation *Kamtſchadales* from their name *Koatche-ai*; and it is nothing extraordinary to find the word *Koatche-ai* changed into *Kontchala*, and *Kontchala* into *Kamtſchadale*, as we find ſeveral ſimilar examples, not only among theſe barbarous people, but the politeſt nations of *Europe*.

With regard to the place where the *Kamtſchadales* came 174
from, or at what time they firſt ſettled here, we can have no certain account; for all that can be obtained from theſe people is only fabulous tradition; and they pretend that they were created upon this very ſpot, and ſay, their firſt anceſtor was *Kutbu*, who formerly lived in the heavens: however by their manners, cuſtoms, language, dreſs, and other circumſtances, it would appear that the *Kamtſchadales* came over from *Mungalia*. Of the antiquity of theſe people *Steller* gives the following proofs: 1*ſt*, that they have loſt every tradition of their origin. 2*d*. That before the arrival the *Ruſſians*, they knew little of any other people, except the *Koreki* and *Tchukotſkoi*; and it is but lately that they came to any knowledge of the *Kuriles* and *Japaneſe*, and this was owing to the arrival of the latter among

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926–27 set
161 the number of Itel'mens at 814.

The term Itel'men means "resident," "living man." In the documents
● 101 and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

17: Heizer--421 E-3 (no date) 1943 RY3 Kamchadal RY3
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"The Kurile Islands, except the two northernmost opposite Cape Lopatka, were occupied by Ainu. These two northern islands, Paramushir and Shumshiri, were inhabited by Kamchadal. There are a few slight indications that others of the Kurile Islands may have been occupied by Kamchadal, or, at any rate, strongly culturally influenced from Kamchatka."

18: Yarmolinsky--3 L-4 (no date) 1947 RY3 Kamchadal RY3
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"With his assistants Jochelson reached the peninsula in the summer of 1910 and spent the following winter studying the language and culture of the aborigines, the Kamchadals, or, as they call themselves, Itelmens (='men')."

24: Lansdell-637-638 M-2 (1879) 1882 RY3 Kamchadal RY3
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has ~~scarcely~~ any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

27: Sauer--308 T-2 (1789-93) 1802 RY3 Kamchadal RY3
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

29:Cochrane T-2 (1821-22) 1824 Kamchadal RYJ

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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Ko 141 On the whole the coastal Koryak type holds an intermediate position between the Kamchatka and the Eskimo types.

144 [6] The Itelmen, who have preserved their language, are anthropologically still mixed up with the Russians. This is
Ka 144 corroborated both by the data of the interviews and by the similarity of all their traits to the white-haired Europeoid race. These traits include pigmentation, stiffness of the hair, the structure of the cheekbones, the profile of the upper lip, etc. It follows therefore that the deviation of the Itelmen from the "Mongoloid standard" in the form of their nose, in the structure of their eyelids, and in the development of their beard, as well as the similarity of these Itelmen traits to those of the Eskimo must be regarded not as proof of a direct relationship of the two groups but as a result of the mixture of the Russians with the Itelmen. The ancient Itelmen type was indubitably characterized by a greater frequency of the epicanthus than among the Eskimo and by a less sharply defined nose. On the whole, they were probably related to the coastal Koryak, and thus they also held an intermediate position between the characteristic representatives of the Eskimo and the Kamchatka types.

The Russianized Itelmen (in the future I shall call them by their conventional term "Kamchadal") are not easily distinguished from the descendants of the ancient Russian inhabit-
Ka 659 ants of Kamchatka. In the official documents only the 1897 census made a clear-cut demarcation between the two groups,
101 565 [the Kamchadal, and the Russianized descendants of the Itelmen--Analyst] and such a demarcation was facilitated at the time it was done by the difference in social rank (sosloviye) of the members of the two groups. Yet even then this was an isolated and purely formal difference. The 1926 census reflects in this respect an unbridled arbitrariness of the census takers. The inhabitants of the ancient Upper Kamchatka and Lower Kamchatka forts are referred to in the census as Kamchadal, while the Russianized descendants of the Itelmen from the villages of Kikhchik, Kolpakovo, Krutogorovo, Oblukovina, etc. are referred to as Russians.

Ka 101 The contemporary official records are fully justified in not giving recognition to the term "Kamchadal" and in regarding all the Russian-speaking people of Kamchatka as Russians. However, this term has not become obsolete in everyday conversation, and is employed by the natives as well as by the new immigrants not only with reference to the Russianized Itelmen but also to the descendants of the ancient Russian

Ka 101 population of the area. The ethnonym "Russian" is used in everyday speech to refer only to the natives of the central areas of the RSFSR or of Siberia. Its equivalents are the Lamut (basically Yakut?) term "nyucha" and the Reindeer Koryak term "mel'khitan" (now becoming obsolete). The descendants of the ancient Russian population of Tigil', Mil'kov, etc., together with the Itelmen (both the Russianized ones and those who preserved their own language) and the coastal Koryak, are referred to in the Lamut language by the common term "kheek" (plural "khayakyl") and in the Reindeer Koryak dialect by the term "nymyllon."

Ka 144 An especially strong racial mixture are the inhabitants of the Kamchatka River valley where the Kamchadal and the Russian villages follow one another throughout the valley's length. It seems that under these conditions all the native inhabitants who speak Russian should be looked upon as a homogeneous whole. However, such is not at all the case.

Altogether 182 people who spoke the Russian language and called themselves Kamchadal were studied in the Kamchatka River valley. If in the use of this ethnonym one encounters discrepancies caused by the current official usage, these discrepancies arise both in the case of the native Russian and of Ka 162 the Kamchadal proper settlements. The 1897 census indicated that there were there 103 persons both of whose parents were descendants of the old Russian settlers; that the persons whose parents were Kamchadal proper were 41 in number; and that there were 38 persons born of mixed marriages. A simple calculation shows that as a result of free intermarriages there must actually have been 87 Russians, 17 Kamchadal, and 78 persons of mixed stock. The intermarriages can hardly be explained by the [7] former social stratification of the population. They are rather to be explained by the territorial arrangement that members of different groups have. However, this racial mixing has been taking place already for a number of generations, and in addition the inhabitants of Kamchatka frequently change their place of residence. Although the number of our observations was small, the counting of the medians and of frequencies of all the basic traits indicates that differences between the so-called "pure" and the so-called "mixed" Kamchadal have been preserved.

Ka 142 Below is a small table composed only for the Kamchatka River valley. The figures are averages for both sexes (with

1: Kolarz J-4 (no date) 1954 RR1 Siberia
Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

2: Schrenck--268 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu ABG
Kamchadal RY3

K 175 131 167 A 175 /127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

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2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101] Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

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with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

2: Schrenck--270 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu AB6

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6. (cont.)
Islands south of Onekotan, Krascheninnikof gives a faithful translation of Müller's remarks, but for the northern ones, as well as for southern Kamchatka, he ignores them completely, since here he was able to rely upon his own experiences and observations, as well as Steller's. Later (Samml. Russ. Gesch., Vol. III, 1758 p. 79), Müller agreed with the assertions by Steller and Krascheninnikof and declared that it was nothing but "common usage" among the Russians on Kamchatka to call the inhabitants of the first island and of the mainland to the south of Bolscherezk "Kuriles," whereas they were nothing but Kamchadal with a different language dialectally.

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And they carried the same designation, in adjectival form, over to many localities in southern Kamchatka, as is shown by the names Kurilskoje /128/ osero, Kurilskij Ostrog located on an island in the lake named, Kurilskaja Lopatka, etc.

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As for the origin of the name "Kuriles" for the Ainu on the island chain to the south of Kamchatka, among the Russian writers since the days of Golownin it became, I might almost say, a custom to derive the name of the people from that of the islands, and the latter from their smoking volcanoes (kuryashchiyasya sopki) (1). Steller, however, has already

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1. Golovnina, Zap. o prikliuch. ego v" plienu u Iapontsev", v" 1811, 1812 i 1813 g., Pt. III, St. Petersburg, 1816, p. 158; A. Sgibnev", "Bunt" Ben'evskago v" Kamch. v" 1771 g. /The Revolt of Ben'evskii in Kamchatka in 1771/" Russk.

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1. (cont.)
Starina, 1876, March, p. 534). Polonskij ("Kurily."-- Zap. Geogr. Obshch. Po Otd. Etnogr., Vol. IV, 1871, p. 369) went even a step further in that he thought that the name derived from the smoking volcanoes were all the more likely preserved since to the approaching mariner these islands emerged out of the fog in which they were almost constantly wrapped, and thus seemed to be smoking themselves. This derivation of the name "Kuriles" is also repeated in Bickmore's article on the Ainu (Amer. Journ. of Science, May, 1868, p. 18). As an oddity I might give Tronson's assertion that the name Kuriles for the islands came from a lake of the same name (Kurilskoje osero) located in the south of Kamchatka, whose inhabitants had most likely emigrated to the islands (Tronson, Pers. Narrat. of a Voyage to Japan, Kamtsch., Siberia, Tartary, etc. in H. M. S. Barracouta, London, 1859, p. 158).

A Steller, however, has already
K pointed out that the name Kuriles customary among the Russians
101 for the inhabitants of the like-named islands was connected
175 with the name that the Italmen from Bolschaja reka to Lopatka give to this people and which sounds like "Kuschi" or "Kusi" (2).

2. Steller, op. cit., pp. 6, 7, 30.

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[114] He himself, however, erroneously derives this latter name from a special way of dancing customary among this people, that "Kuschi" would mean something like "dancing" or "jumping" (3).
3. Steller, OP CIT., P. 248, note a.

2: Schrenck--407 (1854-1856) 1881-1895 RX2 Gilyak
Historical Manchuria AG2
Feudal Japan AB2
Kamchadal RY3

H.M. 101 174 /192/ At the same time, however, he also calls attention to the fact that if in the place in the Rubruquis at which the Taule and Manse peoples are mentioned (1) "Taule" is taken to stand

H.M. [113]

1. Marthe, "Taule et Manse" (Zeitschrift der Gesellschaft für Erdk. 475 ff). The passage concerned in the Rubruquis runs: " "Magister W. told me that he himself had seen messengers of certain peoples who call themselves Taule and Manse, who live on islands where the sea around freezes in winter so that then the Tatars are able to cross over to them" /translated from the Latin/.

for "Caule," that is, Kaoli, meaning Korea, it follows that the Man-dse were found in or near Korea even before Kublai Khan's colonies, to which the Russian sources want to trace back the introduction of this name in the Ussuri region. Along with Marthe, however, we shall naturally leave the final solution of this question to the historians and Sinologists.

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It remains for us to discuss the names customary among the Amur peoples for the third of the East Asiatic civilized peoples with whom they come in contact, the Japanese. As is well known, Steller (2) reports that the Kamchadal or Italmen call

F.J. 101 439 K 192 [113]

2. Beschreibung von dem Lande Kamtschatka /Description of the Kamchatka Region/, pp. 3, 249, 320.

the Japanese "Sühsaman" or "Sühsemen," and they do this, as is expressly noted by him, because the Japanese brought them the first iron needles, whereas up to this time they had made them for themselves out of sable bones; in the Italmen, and in all dialects, the needle is called sühse. Krascheninnikof (3)

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3. "Opisanie zemli Kamchatki /Description

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3. (cont.)
of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[2]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

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[2] [Footnote "(5)" appears on p. 409--Analyst]

2: Schrenck--409 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Southeast Siberia RX1
Feudal Japan AB2
Kamchadal RY3
Ainu AB6

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"Ssissa" (5). In view of the lack of any contact between the Amur

S.S. 175 101 174 439 FJ. 101

5. The Chinese traders on the Amur and Sungari use the same name for the Japanese. Even in the Sungari region Venault heard of a "Si-san" country to the north, which he hoped to reach on his trip down the Amur (1850). On the way, he was told by Chinese traders that they themselves never went to Si-san, but only traded with it through the mediation of the Jupi-tatse. On the basis of all the information that he had collected, he suspected that "Si-san" was the island of Karaftu (Sakhalin) (see his "Excurs. dans les parties intér. de la Mandchourie" -- Nouv. Ann. des Voyages, fifth series, Vol. XXX, 1852 [Vol. II], pp. 207, 215, 222, 224).

SS. [113]

K SS. FJ 101 114 174 177 A 101 A [133] A FJ. 101 175

In view of the lack of any contact between the Amur peoples and the Kamchadal and their completely different languages, the almost identical name that they have for the Japanese indicates that they must have taken it /193/ from the same source. And this source is easily found. It is the Ainu: for the Amur peoples, the Ainu of Sakhalin; for the Kamchadal, the Ainu of the Kuriles. Just as the one bridge, Sakhalin, leads from Jesso /Yesso/, the main island of the Ainu, to the Amur region, so the other bridge, the island chain of the Kuriles, leads from Jesso to Kamchatka. It is known from Japanese as well as European sources that the Ainu of Jesso have a similar name for the Japanese. In the description of Jesso written in the seventeenth century by the Japanese Kannemon and translated by Titsingh (1).

A FJ. [113]

1. "Jeso-ki, ou Descr. de l'île de Jesso," etc., compiled by the interpreter Kannemon and published in 1632; translated by Titsingh,

Feudal Japan AB2
Ainu AB6
Kamchadal RY3
Southeast Siberia RX1

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1. (cont.)
Rumjanzof Bay on Jesso, as well as in Aniwa /Aniva/ Bay on Sakhalin, about the names Schischa (which he gives as "Chica" in a literal rendering of the French spelling or perhaps as the result of an oversight or printing error) and Tschoka, with which La Pérouse had labeled these islands.

any doubt from the correspondence of this name to Ssissa and Ssisam, merely to the Japanese coming from there. The "Sühsaman" or "Schischaman" of the Kamchadal are therefore not Ainu from Jesso, but rather, as Steller and Krascheninnikof quite correctly stated, Japanese; but they received this name not from the Italmen word for needle, but, on the contrary, the Kamchadal called the steel needle, because it came from the Japanese, "sühse" or "schisch," i.e., Japanese. On the other hand, they undoubtedly would have had a special term for the bone needle already known to them earlier (2).

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[181]

2. That the steel needle and the bone needle, in spite of the fact that they were known to the Kamchadal at different times and were certainly of different shape, were nevertheless supposedly designated with the same term is inconceivable simply because this would presuppose an ability to generalize greater than one finds among a people standing at such a low level of culture.

S.S.
10

In conclusion the names with which the Amur peoples designate the Russians should be mentioned. It seems to be the same among all of them throughout. I have always heard the Russians called "Lotscha" by the peoples of the lower Amur region with whom I myself had dealings for a shorter or longer

342 [364] [417] [101]

/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114 10 [113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

K 114 101

/334 cont./

4. (cont.)
knew nothing of the Kamchadal. One can explain such a misunderstanding of Steller's remarks as happened to Gerland in part by Steller's antiquated style and in part by the frequently (and even at the place concerned, p. 8) exceeding faulty and incorrect punctuation in this publication of his work. As I have already pointed out at another place (Reis. u. Forsch. im Amur-Lande, Vol. II, p. 762, note 3), Pallas said of it that it "was printed from a rough draft and in the hands of the publisher (J.B.S.) became loaded with the most inexcusable copying and printing errors revealing a great ignorance (Neue Nord. Beytr., Vol. II, p. 255). One will be convinced of the accuracy of this opinion by Pallas on every page while reading Steller's work. For this reason I believe that the apparent difference in these two Koryak terms for the Kamchadal can be traced to merely a printing error. Steller also says that the sedentary Koryak along the Sea of Okhotsk are called "Nümala akalila," i.e., sitting, resting, by their countrymen who roam with reindeer. Could it be, however, that this "Nümala," like "Namalau," is also a reference to their subterranean dwellings?

KK [101]

KK [101 194 342]

Some, the sedentary ones, of the Koryak, also a Paleo-Asiatic people, retained the earth yurt to this day, insofar as they have not already adopted Russian customs and hence also Russian dwellings, for example, according to Ditmar (5), /335/in particular

KK 342 198 199

5. "Ueber die Koräken und die ihnen sehr nahe verwandten Tschuktschen /On the Koryak and the Chukchee Very Closely Related to Them/" (Bull. de la cl. hist.-phil. de l'Acad. Imp. des sc. de St. Petersb., Vol. XIII, pp. 104, 107, 109; Mél. russes, Vol. III, pp. 8, 12, 16).

KK [113]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

122 were informed of, they ordered him to join them, and return with them to *Petersbourg* in the year 1743. Mr. *Steller*, in his return from *Siberia*, died of a fever the 12th of *November*, 1745, in the town of *Toumen*.

128 When Mr. *Krasheninicoff* had given the Academy of Sciences a full report of all his obſervations at *Kamtſchatka*, and had likewiſe received all Mr. *Steller*'s papers, it was thought proper to join theſe two works, and to commit their compilement to the perſon who had the greateſt ſhare in the merit of the diſcovery. This is the origin of the following deſcription of *Kamtſchatka*; a country never yet deſcribed by any author of credit, and where the manners and cuſtoms of the inhabitants are beyond meaſure ſingular and
114 uncommon. It is to be wiſhed that ſuch writers as have hitherto given us accounts of new-diſcovered countries had taken the ſame pains to inform themſelves that this writer hath. The author was advanced in the year 1745 to be an adjunct of the Academy of Sciences, and in the year 1750 was made profeſſor of botany and natural hiſtory. He died in the 42d year of his age, when the laſt ſheets of his book were printing off; and was one of thoſe few whom perſonal merit alone, and no advantages of birth or fortune, contributed to raiſe.

102 128 For the better underſtanding of the geographical deſcriptions, it was thought proper to add two maps of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

of *Kamtſchatka* and the neighbouring countries, between which and other maps of thoſe countries, even ſuch as the academy itſelf hath formerly publiſhed, the curious reader may obſerve a great difference. But the author aſſerts that every thing is laid down from the ſtricteſt inquiry, and had purpoſed to ſupport the authenticity of his maps, by publiſhing ſuch memoirs as would prove their accuracy beyond diſpute.

102/128

A GENERAL

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

102

facing p. 33

102

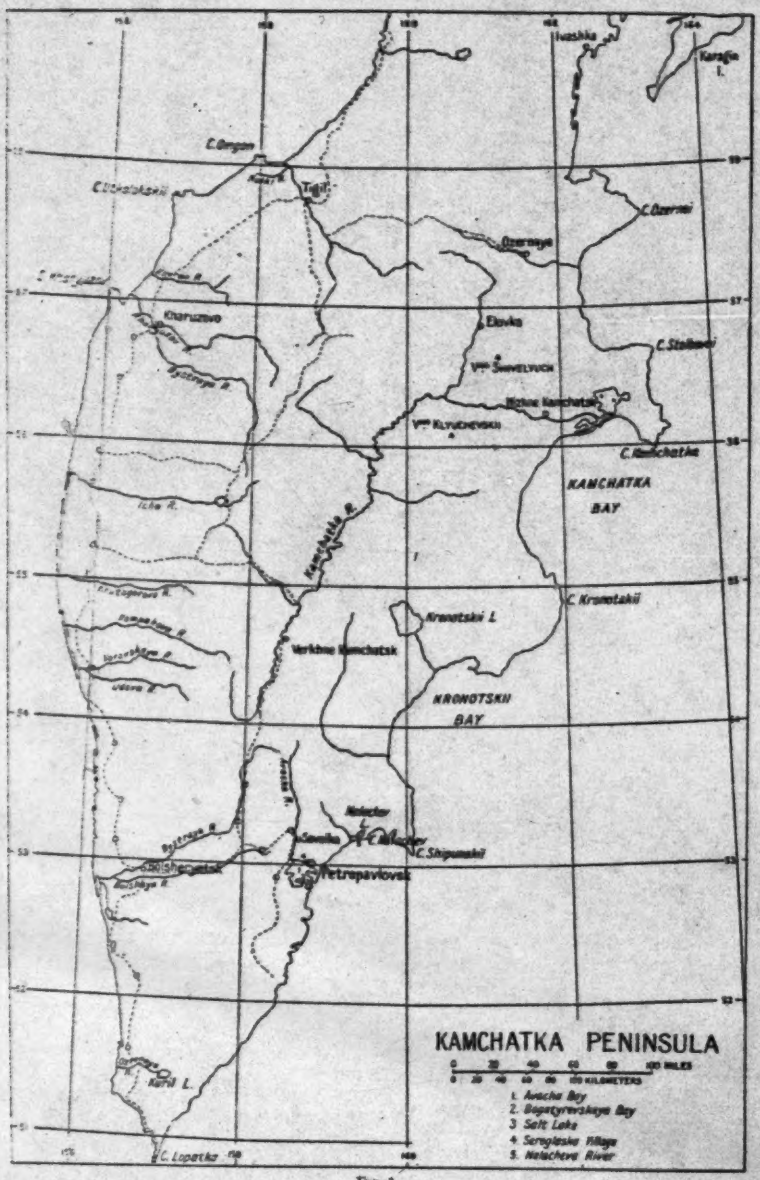
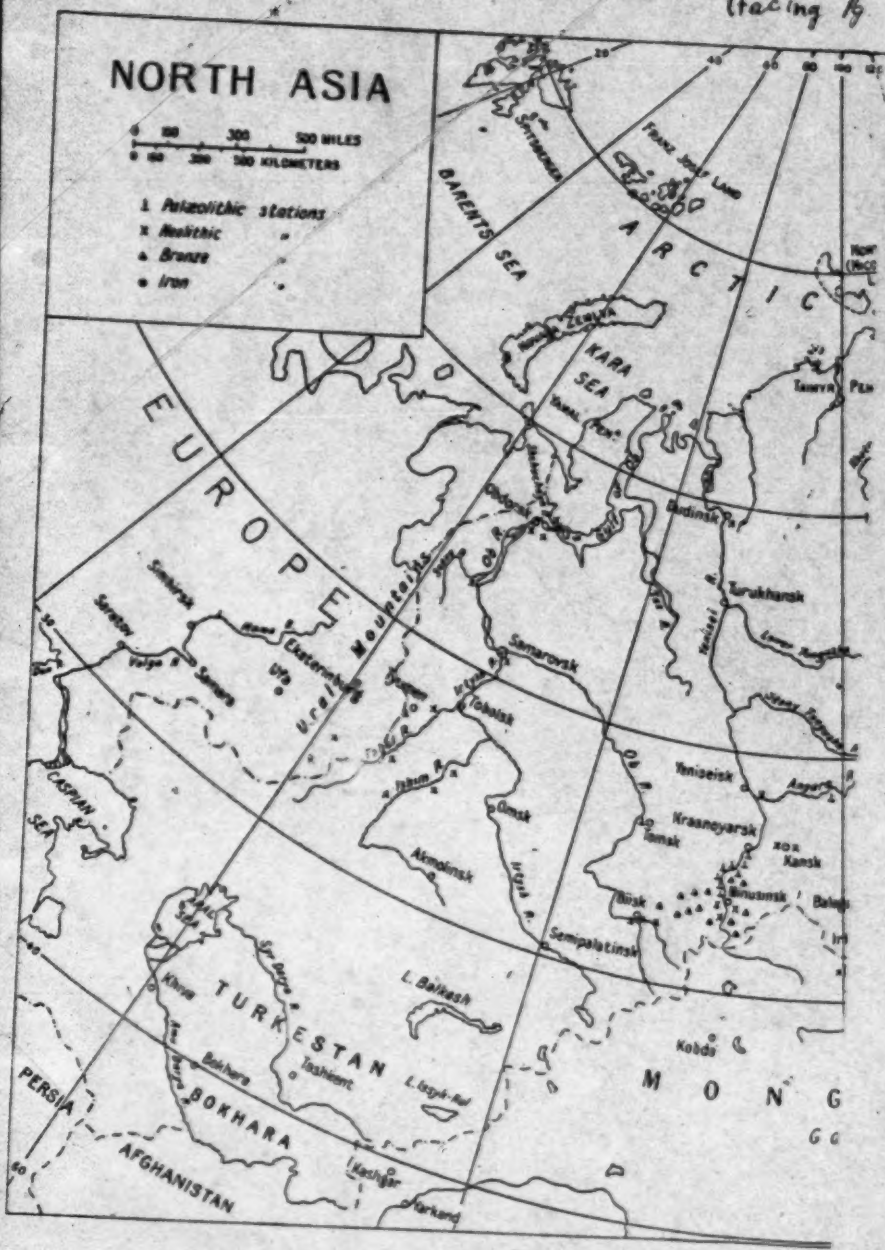

Ivashka
Karagin I.
C. Ozernoi
Ozernaya
Ebeka
Vm. Shevelyuch
Vm. Klyuchevskii
C. Stolbovoi
C. Kamchatka
KAMCHATKA BAY
Kamchatka R.
C. Kronotskii
Kronotskii L.
Verkhne Kamchatsk
KRONOTSKII BAY
Nalachevo
Semeka
C. Shipunskii
Petropavlovsk
Karagin I.
C. Lopatka
KAMCHATKA PENINSULA
1. Avacha Bay
2. Bogatyrevskaya Bay
3. Salt Lake
4. Sengleska Village
5. Nalacheva River

FIG. 1

5: Jochelson A-5 (1910-11) 1928 Kamchadal

(facing p 41)

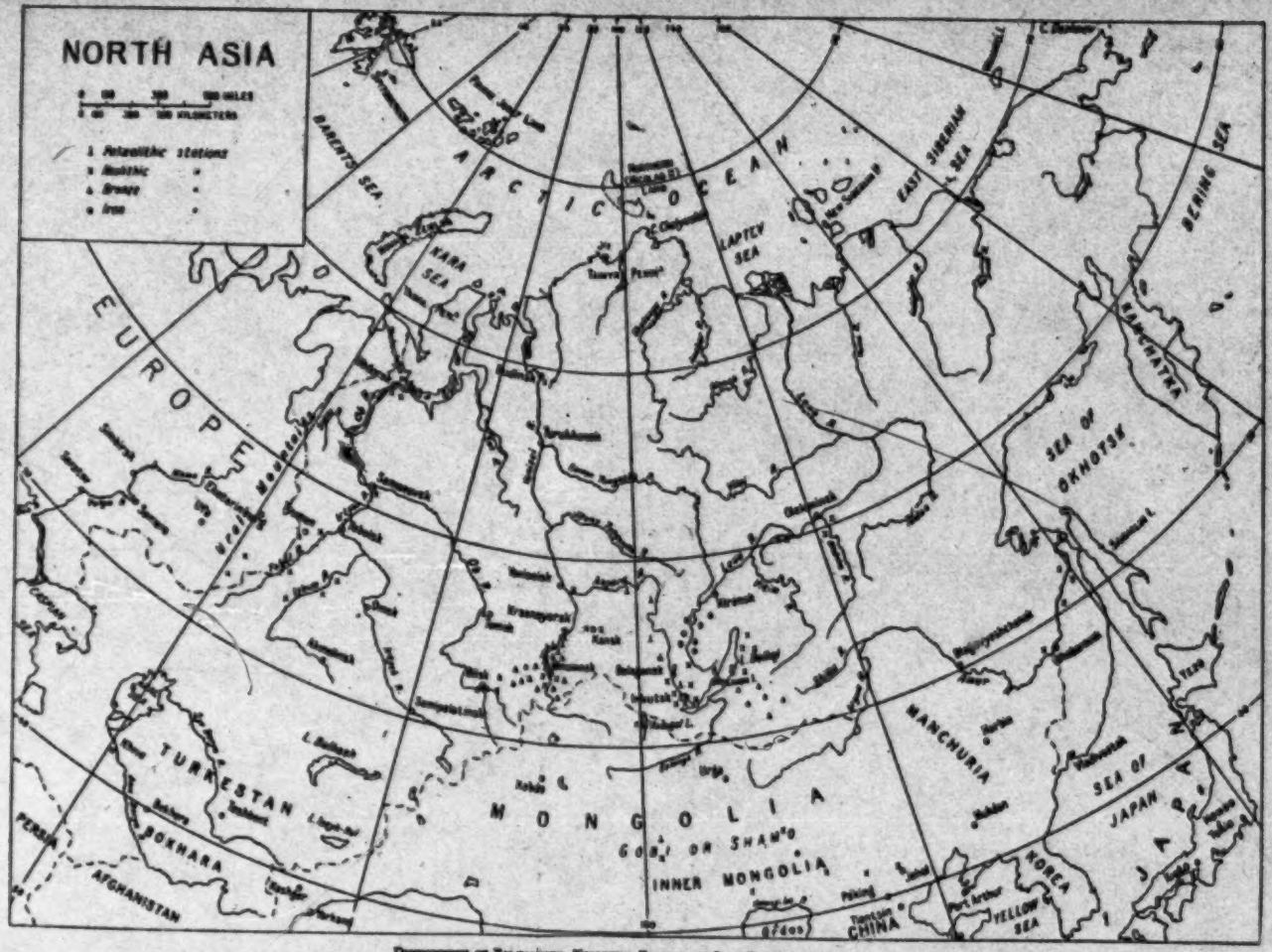
102



DISTRIBUTION OF PALÆOLITHIC, NEOLITHIC

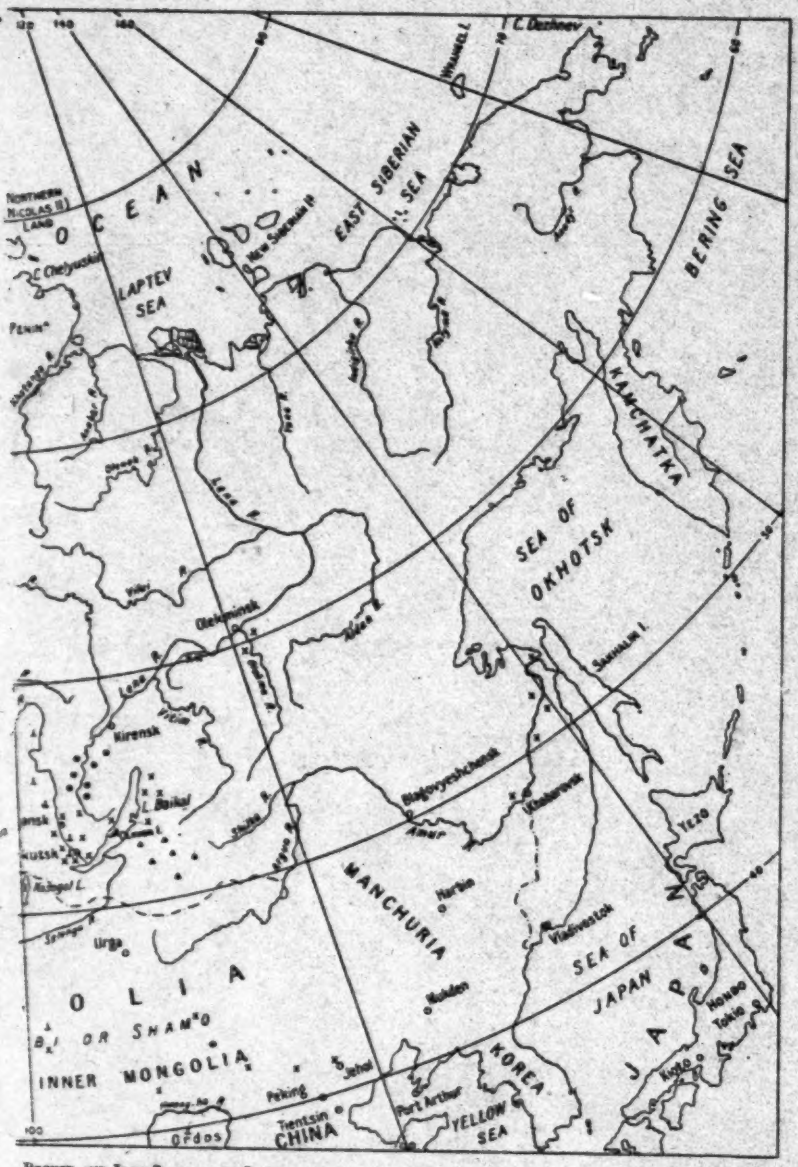
102

[Facing P. 41]

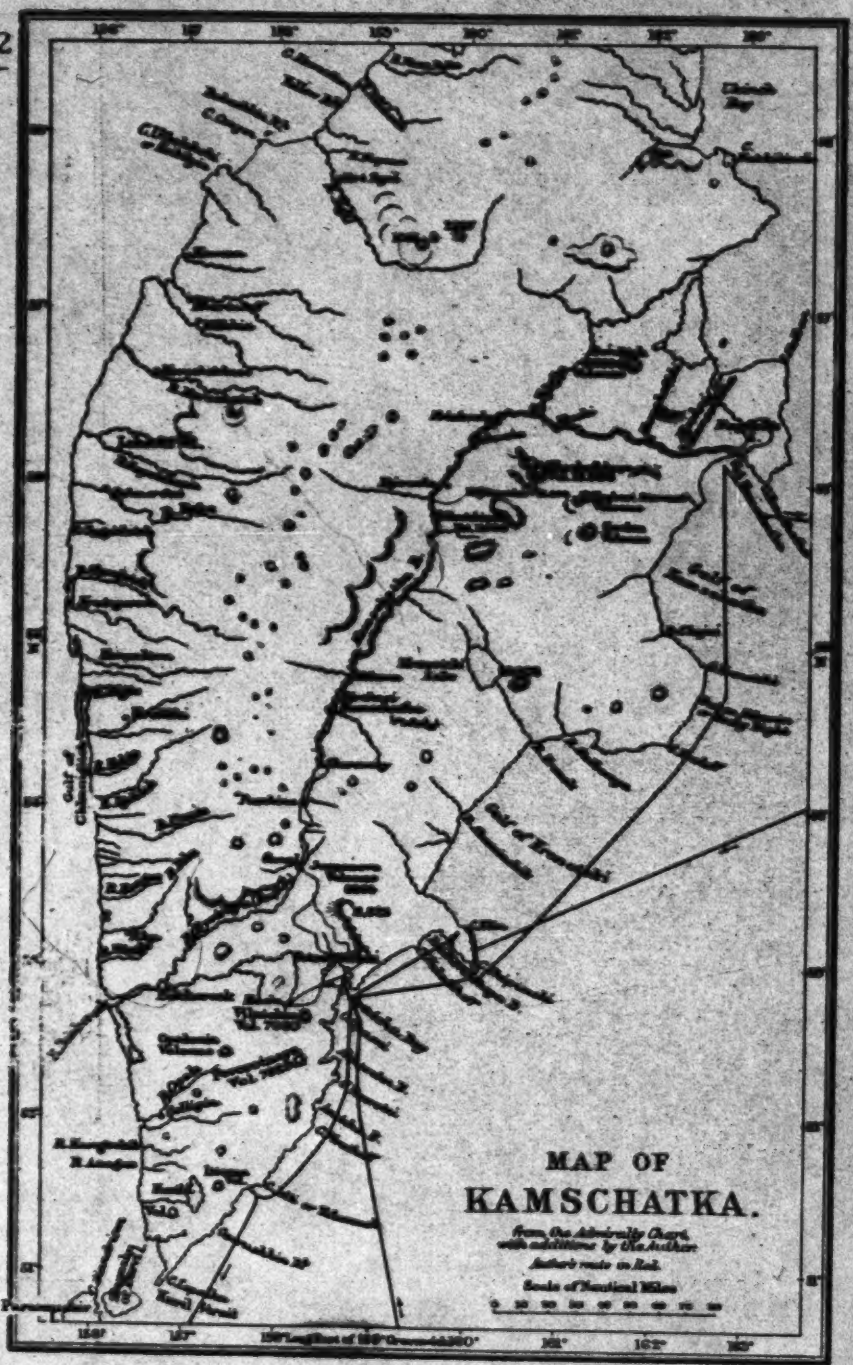

NORTH ASIA
1. Petrolithic Stations
2. Neolithic "
4. Bronze "
5. Iron "
ARCTIC OCEAN
BARENTS SEA
KARA SEA
LAPTEV SEA
EAST SIBERIAN SEA
BERING SEA
KAMCHATKA
SEA OF OKHOTSK
EUROPE
Urals Mountains
TURKESTAN
BOKHARA
AFGHANISTAN
PERSIA
MONGOLIA
GOBI OR SHAMO
INNER MONGOLIA
MANCHURIA
KOREA
YELLOW SEA
SEA OF JAPAN
JAPAN
CHINA
Peking
Tientsin
Port Arthur
Dairen
Harbin
Urga
Kiakhta
Irkutsk
Yakutsk
Verkhoyansk
Nizhnekolymsk
Ust Kamchatsk
Petropavlovsk
Nikolaevsk
Vladivostok
Khabarovsk
Blagoveshchensk
Semipalatinsk
Tashkent
Samarkand
Bokhara
Kabul
Tobolsk
Omsk
Tomsk
Krasnoyarsk
Yenisei R.
Lena R.
Ob R.
Kolyma R.
Amur R.
Aral Sea
Lake Baikal
Lake Balkhash
Lake Issyk-Kul
Lake Ladoga
Lake Onega
Lake Ilmen
Lake Peipus
Lake Chudskoe
Lake Pskov
Lake Rybinsk
Lake Vyg
Lake Kubenskoe
Lake Vologda
Lake Sheksna
Lake Beloe
Lake Ilmen
Lake Onega
Lake Ladoga

(Facing P. 41)

● 102

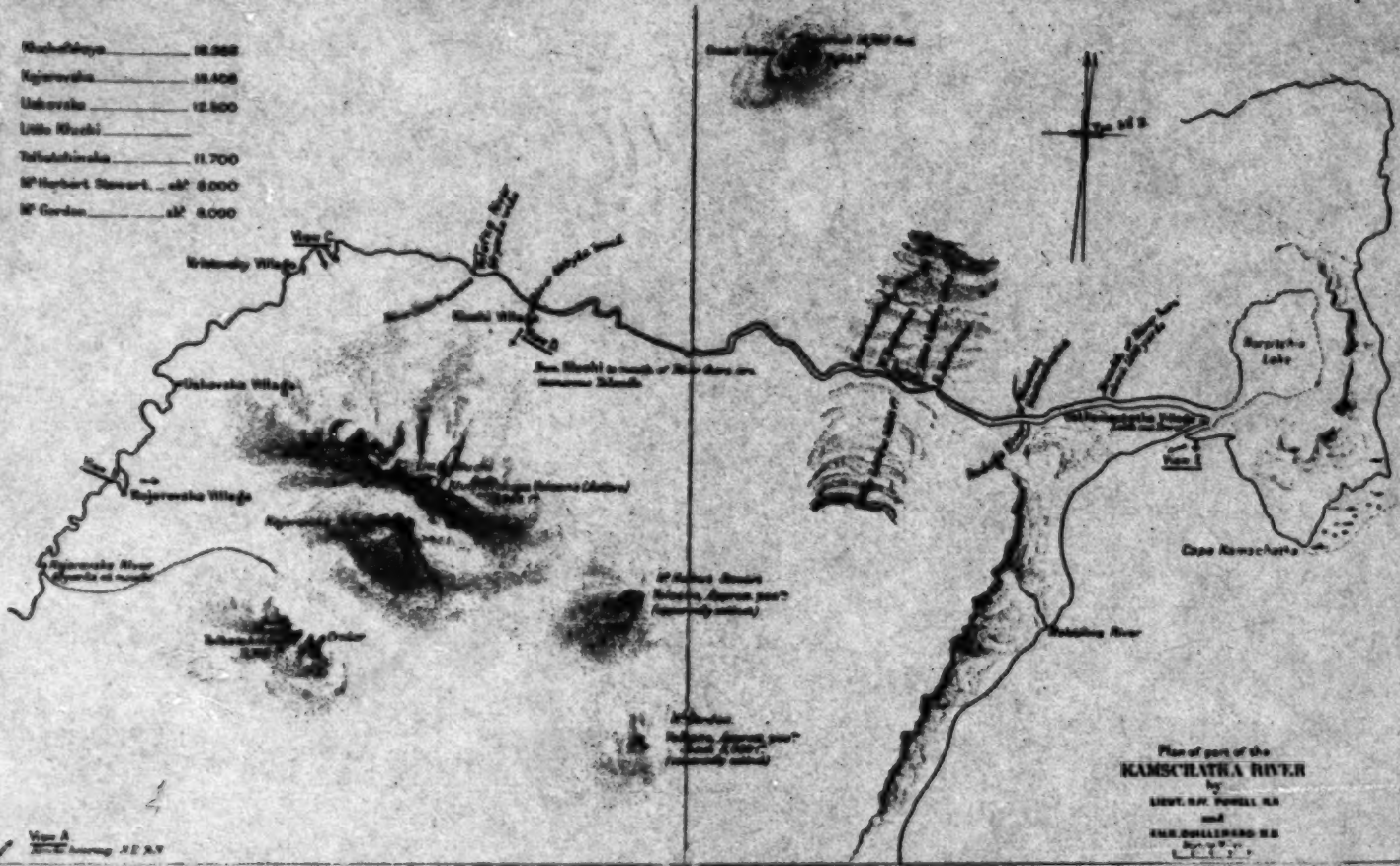


Bronze and Iron Stations of Siberia



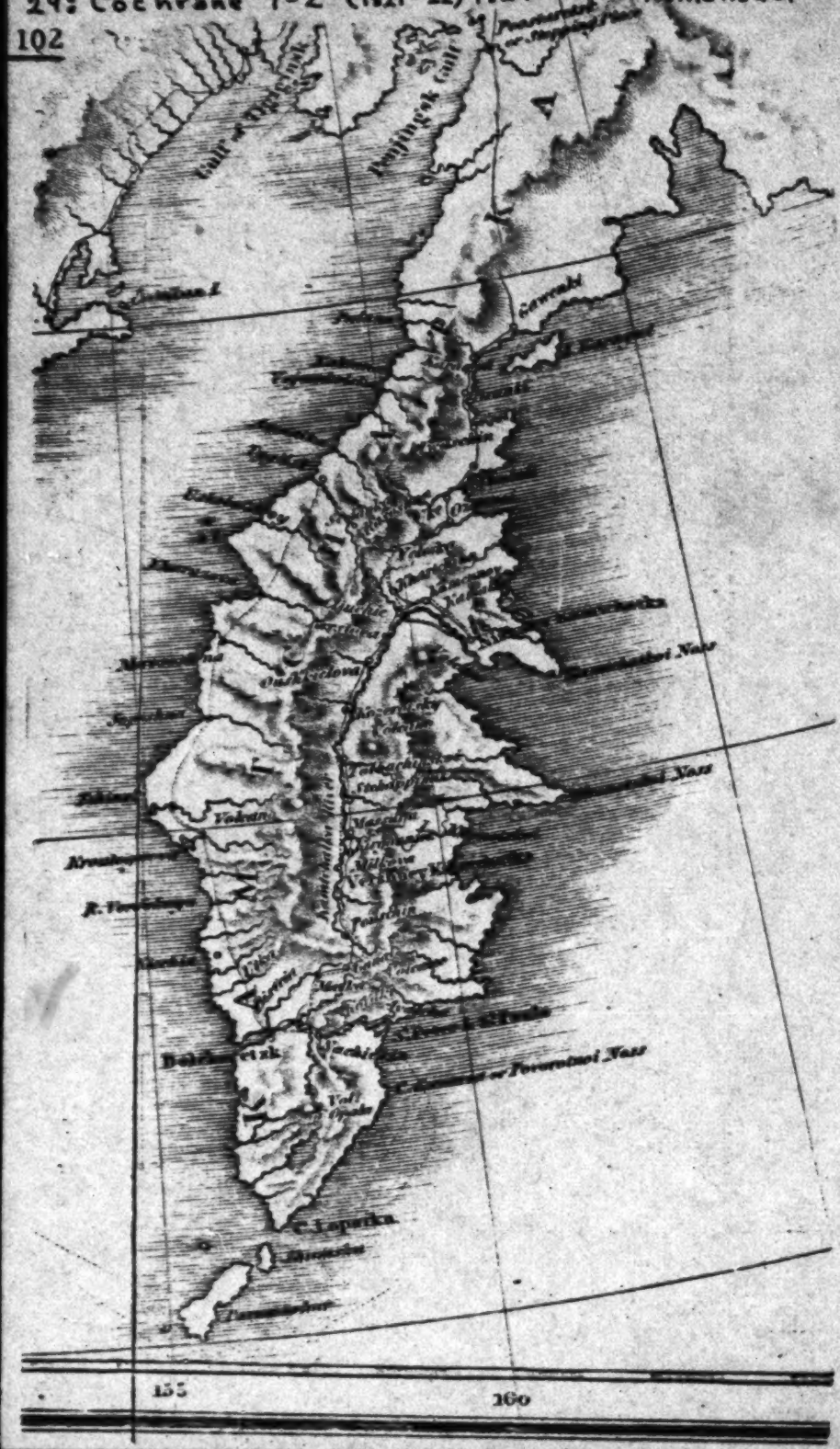
Standford's Geog.l Estab.t London

102
133


A
B
C
D
E
F
G
Kamchatka Lake
Cape Kamschatka
Plan of part of the
KAMSCHATKA RIVER

29: Cochrane T-2 (1821-22) 1924 Kamchadal

102


Gulf of Penzhinsk
Penzhinsk Gulf
Gavrski
Nizhnekamchatsk
Tigil
Ust'-Bolsheretsk
Kamchatka
Petropavlovsk
Avachinskaya Bay
Nizhnekamchatsk
Tolbachinskoye
Kozyrevsk
Ust'-Kamchatsk
Kamchatka River
Ust'-Kamchatsk
Petropavlovsk
Avachinskaya Bay
Kamchatka
Kamchatka
Kamchatka

112° 53′ eaſt longitude, and thence to *Bolſcheretſkoi* or the Great River 14° 6′ eaſt. The figure of the peninſula of *Kamtſchatka* is ſomewhat elliptical, being broader towards the middle, and growing narrower towards both ends. Its broadeſt place is between the mouth of the river *Tegbil* and the river *Kamtſchatka*. Towards the ſource they are joined by the river *Elouki*. 131

The *Elouki* runs in the ſame latitude with thoſe rivers for 415 verſts. They call the ſea which ſeparates *Kamtſchatka* from *America* the Eaſtern Ocean. On the weſtern ſide lies the *Penſchinſka* ſea, which begins near the ſouthern point of the cape of *Kamtſchatka* and the *Kurilſki* iſlands, and runs northward between the weſtern coaſt of *Kamtſchatka* and the coaſt of *Ochotſkoy* more than 1000 verſts. The northern part is called the bay of *Penſchinſka* from the river *Penſchina* which falls into it. The hills make one continued ridge from north to ſouth through the peninſula, almoſt equally dividing the country. From this ridge ſeveral others extend towards the ſea, between which are the courſes of the rivers. Theſe ridges ſometimes run a conſiderable way into the ſea, and are called Noſs, or capes. There are more of theſe upon the eaſtern than the weſtern coaſt. All the bays between the capes are called, in general, ſeas; each having its particular name, as the *Olutorſky* ſea, *Kamtſchatka* ſea, *&c.* We ſhall hereafter give our reaſons for calling the whole peninſula by the name of *Kamtſchatka*, though in fact it hath in none of the different languages of the inhabitants any general appellation; but every part of the country receives its name from its inhabitants, or ſomething remarkable obſerved in it: and even the *Ruſſian* Coſſacks underſtand *Kamtſchatka* to be only the country lying near the river of that name; and to the other parts of this peninſula they have given the following appellations: 133 103

Kurilſki Country is the ſouthern part, ſo named from the *Kuriles* that inhabit it.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 *The Coast* extends from the *Bolscheretskoi* or Great River to the *Tegbil.*

Awatscha extends from the *Bolscheretskoi* to fort *Awatscha.*

Bobrovoi or *Beaver Sea* is the district round *Kamtschatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtschatka* to the *Tegbil.*

Ukoi is the eastern coast from the river *Ukoi.*

Tegbil is the western coast from the river *Tegbil.*

133 *Kamtschatka* is plentifully furnished with rivers; however they
361 are so little that none of them are navigable by the smallest vessels,
563 except the river *Kamtschatka*, which will carry small vessels 200 versts upwards from its mouth. Into this river it is reported that some *Russians* were brought by sea, long before its subjection to *Russia.* It is at present called *Theodotoshine*, from the chief of those people thrown a-shore, whose name was *Theodot.* Next to this, the most considerable rivers are, the *Bolschaia-reka*, or Great River, *Awatscha* and *Tegbil*; upon which the *Russians* have set-
133 tlements. *Kamtschatka* is likewise very well furnished with lakes, particularly about the river of that name, where they are so numerous that there is no passage over land in the summer-time. Some of them are very large: the most considerable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtschatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilskoy*, out of which runs the river *Ofernoi.*

133 The river *Kamtschatka* rises in a marshy ground, and first runs
712 north-east; then inclines more to the east, and turning at once
R towards the south-west, falls into the ocean in 56° 30′ north
177 latitude. From its source to its mouth, in a strait line, is 496
.71 versts; but the length of its course, according to the exactest computation, is about 525 versts; during which it receives into it many brooks and rivers. About two versts from its mouth, upon the right side, are three deep bays. There are several forts built along the banks of this river by the *Russian* Cossacks, to

awe

awe and keep in ſubjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtſchatka* on the left ſide, and its head meets that of the *Tegbil*.

The *Tegbil* runs almoſt in the ſame latitude with the *Kamtſchatka*; and the ſtrait road from the one to the other is by the river *Elouki*. Some little forts and ſettlements of the natives are ſcattered here and there upon its banks.

The *Bolſchaia-reka*, or Great River, called by the natives *Kreksha*, runs out of a lake 185 verſts to the eaſt from its mouth, and falls into the *Penſchinſka* ſea in the latitude of 52° 45'. Its mouth is reckoned to be 555 verſts to the ſouth diſtant from that of the *Tegbil*. It is called Great upon this account, that of all the rivers that fall into the *Penſchinſka* ſea this is the only one which they can navigate from its mouth nearly to its ſpring, and this not without ſome difficulty, on account of its rapidity and the great number of iſlands. At the time of high water it is ſo deep at the mouth that large veſſels may enter; for the water has been obſerved to riſe at full and new moon very little leſs than nine *Paris* feet or four *Ruſſian* yards. It receives a multitude of rivulets; the moſt conſiderable of which is the *Biſtroy* or Rapid River, ſo called from the ſwiftneſs of its ſtream, cauſed by the many ſhoals and cataracts. You may go from the mouth of the Great River to that of the *Biſtroy*, and up within 40 verſts of its head; and from thence over a carrying place to the river *Kamtſchatka*, that ſprings out of the ſame marſh, and runs quite to the Eaſtern Ocean. And though this paſſage muſt be laborious and tedious, upon account of the rapidity of the river, and the many ſhoals and cataracts, where every thing muſt be carried by land, and which would render it impoſſible to advance more than 10 verſts in a day (as I found in my way to *Kamtſchatka* in the year 1739, when the boats were carried over the marſh, about two verſts from the head of the Rapid, to *Kamtſchatka*); yet, conſidering

133 es out of the *Eolipile*, and is so hot that the hand cannot bear it. After passing through a very woody and mountainous country, we come to the remarkable stream *Krodakighe*, or the Larch-Tree River, which rushes out of the great lake *Kronotzkoy*, in such a cascade that one may walk under it: this lake is in length about 50 versts, reckoned to be 40 in breadth, and is near 50 from the sea. Around it are high mountains, two of which about the sides of the upper mouth of the rivulet *Krodakighe*, rise above the rest. Multitudes of rivulets empty themselves into the lake *Kronotzkoy*, whose springs are near those rivers which run into the *Kamtschatka*.

101 133 From this place, nothing worth remarking occurs 'till we come to the *Kronotzkoy* Noss; and here begins the Beaver Sea, which extends to the *Shupinskoy*. The coast from the *Kamtschatka* to the *Kronotzkoy* Noss is every where sandy; and near the bay, called *Ukinskaya*, begin the habitations of the settled *Koreki*; but the *Kamtschadales* inhabit all the country to this place.[1]

103 The river *Nungeen*, which falls into *Nutrenoi* bay, is called, by the Cossacks, *Pankara*, because there was formerly on the south side of the bay a small *Koreki* fort of the same name; but the inhabitants having built a small fort on a high hill on the northern side of the bay, which they called *Gengota*, abandoned it: this fort is surrounded with a wall of earth about ooo a fathom high, and a yard thick, having within it a double pallisade, and on each side are two bastions raised. It has three gates to the east, west, and north. The *Koreki* purpose to leave their old fort, and to remove into the new one, which they have built about the inward point of the above-mentioned bay, and call it *Ueackang-Atenum*: this was the first place that I found fortified by the natives; for the others were nothing more than habitations dug in the earth, surrounded with huts, as with so many towers without any outward fortifications;

1 [all the country south of Ukinskaya Bay]

We now come to consider the rivers that fall into the East Sea from the mouth of the *Awatscha*, towards the south, to the *Kurilskaya Lopatka*; and from the *Kurilskaya Lopatka* into the *Penschinska* sea to the *Tegbil* and the *Pustaia* rivers. /133

There are but few rivulets that intersect the country between the mouth of the *Awatscha* and the *Lopatka*. The ridge of mountains, which divides *Kamtschatka*, extends to the East Sea: the declivity is steep and craggy; and the gulphs and bays, which are formed by these mountains, afford a safe harbour for vessels of any burthen in the worst weather.

The *Kurilskaya Lopatka*, which by the natives is called *Kapoore*, is the southernmost point of the cape of *Kamtschatka*, and divides the eastern from the *Penschinska* sea: it takes its name from its resemblance to a man's shoulder-blade. Mr. *Steller*, who has been upon the *Lopatka*, says, that the place is not more than 10 fathoms above the surface of the sea, and for that reason is subject to great inundations, so that for 20 versts from thence no-body lives, except those who come there in the winter to catch foxes; and when the ice is carried thither with the beavers on it, then the *Kuriles*, who follow this ice along the shore, assemble here in great multitudes. Within three versts from the *Lopatka* nothing grows except moss; and there are neither rivers nor springs, only a few lakes and pools. The soil consists of two layers, the lower is strong, and the upper spongy; and its surface is full of hillocks, and useless. The first rivulet falling into the *Penschinska* sea, is called the *Utatumpit*; two versts from the *Utatumpit*, the rivulet *Tapgutpan* runs into the sea, upon which stands a small fort called *Kochinskoy*; and three versts from thence is the *Pitpuy*, or *Ozernaya*, which runs out of a considerable lake divided from the sea by a mountain. The *Russians* call this river *Kambala*, or Flounder River, because great numbers of flounders are caught in the mouth of it. /103 /133 /134 /137 /133

called *Stanovoy* ridge, we come to the river *Geek*, called by the Coſſacks *Vorovſkaya*, or Rogue's River, becauſe the *Kamtſchadales* who live upon it were frequently concerned in inſurrections, and uſed to kill the tax-gatherers treacherouſly. From hence we meet nothing worth notice 'till we come to a *Kamtſchatkoi* fort, called *Tackauta*, in which travellers uſually equip themſelves for paſſing the ridge. Here the common road lies near a rivulet, from the head of which it paſſes the *Stanovoy* ridge, 'till it deſcends to the heads of the river *Keergena*, which falls into the *Kamtſchatka*. 103 133

From the *Keergena* we paſs up the river *Kamtſchatka* to the *Kamtſchatkoi* fort. The country between the little fort *Tackauta* and the *Stanovoy* ridge is a deſert of 120 verſts in extent, and from the ridge to the upper *Kamtſchatkoi* fort is 65, the land equally barren. 133

The above road is very difficult and dangerous, for a great part of it lies on the river, which, from the rapidity of its current, in many places never freezes. Travellers are obliged, therefore, in ſome parts to keep cloſe to the ſides with great care; for if the ice breaks nothing can ſave them, the rocks on the banks in ſeveral places being ſo ſteep that it is impoſſible to get on ſhore, and the river runs ſo ſwiftly that you are immediately driven under the ice. The ridge is paſſable only in calm and fair weather, for which we are obliged to wait ſometimes ten days or more; at other times it is impoſſible to find the way, and we muſt inevitably fall down the precipices, and be loſt. The properest time to paſs is when no clouds are to be ſeen on the top of the ridge, for even the leaſt cloud is a ſign of a great ſtorm there. To croſs over this ridge takes up a whole winter's day. The greateſt danger is in paſſing over the very top, which is called by the Coſſacks, *Greben*, or a comb. Its breadth is 30 fathoms; it is like a boat with the bottom upwards, the aſcent on both ſides being 133 487

very

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

491 487 *Bolscheretskoi* fort to the *Kurilskaya Lopatka* is 210 verſts 300 fathoms, which ſpace may be eaſily travelled, even in four days; but the Coſſacks of thoſe places have a cuſtom of ſtopping at any ſmall fort, under pretence of ſome buſineſs there, though their moſt probable motive is to refreſh their dogs. At a middling rate I have travelled in three days from the *Kamtſchatkoi* to the *Bolscheretskoi*, which is near 150 verſts.

	verſts	fathoms
From the *Bolscheretskoi* fort to the mouth of the Great River — — —	33	0
From the mouth, along the ſea-ſhore, to the river *Opala* — —	85	0
From thence to the *Koſhubochiek* —	18	0
From thence to the *Yavina* —	15	0
From thence to the river *Ozernaya* —	15	0
From thence to the *Kambalina* —	36	300
From thence to the *Lopatka* —	27	0
In all from the *Bolscheretskoi* to the *Kurilskaya Lopatka* — —	210	300

CHAP. III.

Of the KURILSKI ISLANDS.

109 131 UNDER the name of *Kurilski* iſlands are underſtood all thoſe iſlands which extend from the *Kurilskaya Lopatka*, or the ſouthern end of *Kamtſchatka*, in a row ſouth-weſt quite to *Japan*. They derive their names from the inhabitants of thoſe iſlands which lie neareſt to *Kamtſchatka*, who are called by the

103 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact
131 number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*,
136 and extends in length from the north-eaſt to the ſouth-weſt
161 50 verſts, and in breadth about 30. This iſland is full of
651 mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

7: Lesseps T-3 (1787-88) 1790 Kamchadal

000 the ſame manner as the preceding, we purſued our journey at three o'clock in the
103 morning. We quitted not the ſea coaſt
361 till we came to Gavenki, which was about ten o'clock. The name of the village is derived from the word *gavna*, which ſignifies excrement; and it is ſo called on account of its deformity and wretched ſtate. There are in reality but two iſbas falling to ruin, and ſix balagans very ill conſtructed of bad and crooked wood, which the ſea leaves ſometimes upon the ſhore; for there is not a tree in the whole neighbourhood, and nothing to be ſeen but a few paltry ſhrubs ſcattered here and there at a conſiderable diſtance from one another. I was not aſtoniſhed to learn, that not along ago, more than twenty of the inhabitants voluntarily abandoned their country to ſeek out a better abode. At preſent the population of this hamlet does not exceed five families, including that of the toyon, and two Kamtſchadales

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

K 175 131 167 A 175 /127 cont./ the next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

A K 174 103 192

2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101] Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

A K 114 101 175 /127 cont./

6. (cont.)
Islands south of Onekotan, Krascheninnikof gives a faithful translation of Müller's remarks, but for the northern ones, as well as for southern Kamchatka, he ignores them completely, since here he was able to rely upon his own experiences and observations, as well as Steller's. Later (Samml. Russ. Gesch., Vol. III, 1758 p. 79), Müller agreed with the assertions by Steller and Krascheninnikof and declared that it was nothing but "common usage" among the Russians on Kamchatka to call the inhabitants of the first island and of the mainland to the south of Bolscherezk "Kuriles," whereas they were nothing but Kamchadal with a different language dialectally.

K 103 175 And they carried the same designation, in adjectival form, over to many localities in southern Kamchatka, as is shown by the names Kurilskoje /128/ osero, Kurilskij Ostrog located on an island in the lake named, Kurilskaja Lopatka, etc.

A 101 175 114 As for the origin of the name "Kuriles" for the Ainu on the island chain to the south of Kamchatka, among the Russian writers since the days of Golownin it became, I might almost say, a custom to derive the name of the people from that of the islands, and the latter from their smoking volcanoes (kuryashchiyasya sopki) (1). Steller, however, has already

A 175 114 101 103 113

1. Golovnina, Zap. o prikliuch. ego v" plienu u Iapontsev", v" 1811, 1812 i 1813 g., Pt. III, St. Petersburg, 1816, p. 158; A. Sgibnev", "Bunt" Ben'evskago v" Kamch. v" 1771 g. /The Revolt of Ben'evskii in Kamchatka in 1771/" Russk.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 705

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix hours' 132 293 732 142 000

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

OF THE

NATIVES of *Kamtſchatka*,

AND THEIR

CUSTOMS *and* MANNERS.

PART III.

CHAP. I.

105

Of the NATIVES *of* Kamtſchatka *in general.*

THE natives of *Kamtſchatka* are as wild as the country itſelf. Some of them have no fixed habitations, but wander from place to place with their herds of rein-deer; others have ſettled habitations, and reſide upon the banks of the rivers and the ſhore of the *Penſchinſka* ſea, living upon fiſh and ſea animals, and ſuch herbs as grow upon the ſhore: the former dwell in huts covered with deer-ſkins, the latter in places dug out of the earth; both in a very barbarous manner: their diſpoſitions and tempers are rough; and they are intirely ignorant of letters or religion.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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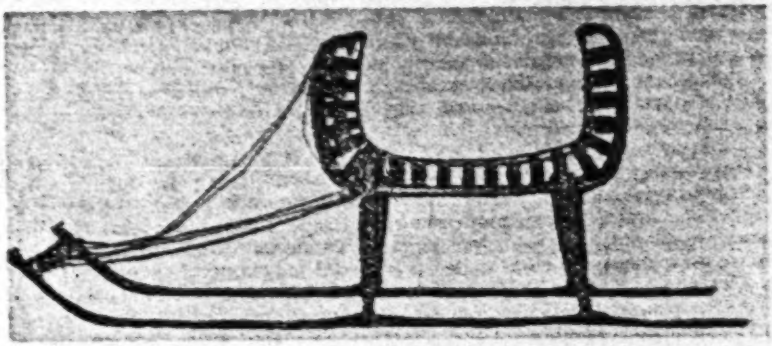

18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic technology. "The former Kamchatka metals, almost until the coming of
[321] the Russians, were bone and stones. They were used in the making of axes,
[324] knives, spears, arrows, lancets and needles," Krasheninnikov writes about the Itel'mens. Rock crystal was also widely used for knives and tips.
[372] Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other
[614] diseases which devastated entire districts. The remnants of the various
[178] clans could no longer exist independently and united into larger territorial units. Thus, instead of the former clan villages, new settlements sprang
[728] up, inhabited by members of various clans. New villages were also created by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half
648 of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

1: Krasheninnikov, Stepan. The History of Kamtschatka, and the Kurilski Islands, with the Countries Adjacent. Gloscester: R. Raike's, 1764.

Yale: Eeac. 736g

Translated from the Russian by James Grieve; Pp. vii, 280; preface; 7 drawings; 2 maps; unpaginated index.

Omissions: All unpaginated front pages [title page, advertisement, errata sheet, map, and the Russian Editor's Preface (pp. i-vii)] have been included. Text proper begins on p. 9. Chapter XX, a discussion of the three Kamchadal dialects, was not included in Grieve's translation. Pages 222-234 on the Koryak are included in the Koryak File as Source 23. Pp. 56 and 168 contain no textual material.

[Krasheninnikov, who later became a professor of botany and natural history at the Russian Academy of Sciences, was a student of natural history when he was assigned as an assistant to the three professors sent out in 1733 by the Russian government to gather information on the geography, natural history, and ethnology of Siberia and Kamchatka. Krasheninnikov alone reached Kamchatka, though George William

1: Krasheninnikov, Stepan.

Steller, who joined the expedition in 1738, was able to make some observations on Kamchatka in the course of his explorations of the Bering Sea and of the American coast. Krasheninnikov, in writing his report on Kamchatka, included some information from Steller's papers on the grounds that Steller, who had died in 1745, would be unable to write up his observations. Steller's papers, however, were published later, and a translation of them can be found in the Kamchadal File as Source 3.

Krasheninnikov's book, though outdated, is the basic source on the Kamchadal. Krasheninnikov's relatively impartial study suffers somewhat in Grieve's translation and in order to correct deficiences in the ethnological section, Chapters XI (religious beliefs), XII (shamans), XIII (holidays and ceremonies), XIV (festivals and games), and XVII (birth and education of children) have been retranslated for the Files from the modern Russian edition of Krasheninnikov. These are included in the Kamchadal File as Source 2. Pictures which are in the Russian edition but not in Grieve's translation have also been included in Source 2. Krasheninnikov's geographical information is somewhat outdated. The section on natural history outlines the uses made of various plants and animals by the Kamchadal. The ethnological section contains little information on kinship, the family, or property. --Analyst]

Field date: 1736-40 Evaluation: Natural Scientist-5

Analyst: Carol Cerf Processed in 1952

5: Jochelson, Waldemar. Archaeological Investigations in Kamchatka. Washington: Carnegie Institution of Washington, 1928.

Pp. viii, 88; preface; 26 photographic plates; 80 text figures; 4 maps; bibliography; index.

Yale: Nkd72. R75+928j.

Omitted from the file: P. II (blank); Pp. 4-8, 22-36, 38-40 (no information on the Kamchadal); P. 78 (blank)

[This author was leader of the Ethnological Division of the Kamchatka expedition made in 1910-11 "at the expense of F. P. Riaboushinsky, Moscow banker, and under the auspices of the Imperial Russian Geographical Society." The book is primarily a report on Jochelson's archaeological diggings in Kamchatka. Such ethnological information as Jochelson includes is quite good, though he relies heavily on Krasheninnikov and Steller for details on the Kamchadal before their Russianization. Nineteen unpaginated photographic plates have been reproduced, and appear at the end of the source, pagination continuing from the last text page of the book. --Analyst]

Field date: 1910-11
Analyst: Carol Cerf

Evaluation: Archaeologist-5
Processed in 1952

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6: Antropova, V. V. The Itel'mens. In, M. G. Levin and L. P. Potapov, editors, The Peoples of Siberia, pp. 876-883, 918-919. Chicago: University of Chicago Press, 1964.

4 illustrations.

HRAF copy.

/This source is a cultural-historical summary about the Itel'mens based mainly upon 18th century sources./

Field date: none
Analyst: Sigrid Khera

Evaluation: Ethnologist-4
Processed in 1968

7: Lesseps, Jean Baptiste Barthélèmy. Travels in Kamtschatka, during the years 1787 and 1788. Vol. I. London: J. Johnson, 1790.

Pp. XVI, 283; preface. Not processed: Pp. 1-7, 19-21, 33-34, 67-68, 151-154, 159-160, 166, 188-201, 204-206, 218-219, 237-239, 247-249, 251-283.
Yale: Eeac. 787g. v. 1.

[CMC: Lesseps served as interpreter for the Frenchman, La Pérouse, who captained an expedition to circumnavigate the globe. La Pérouse, however, left Lesseps in Petropavlovsk to carry dispatches from the expedition to France. To execute his commission, Lesseps left Petropavlovsk on 7 October 1787 and travelled overland to Bol'sheretsk where he spent much of the winter, departing 27 January to go by dog sledge along the Plotnikova, Bystraya, and Kamchatka Rivers to the east coast of Kamchatka, thence along the coast to the hamlet of Gavenki (north of Karaga). From there Lesseps' trip took him across the peninsula and north out of the domain of the Kamchadals. Lesseps' journal of his trip porvides us with quite a bit of information on the Kamchadals, though much of his data on the indigeneous population was derived from the Russian officials in this part of the world. In addition to describing the various ostrogs through which he passed, Lesseps gives us quite detailed

7: Lesseps, Jean Baptiste Barthélèmy.

information on the Russian administration of the peninsula, and he discourses on the dwellings, clothing, food, hunting and fishing, the sledges, the dancing, the medical care and the shamans of the Kamchadal. Large sections from volume 1 of Lesseps' account have been included in the file, but the following have been omitted: paragraphs dealing with Mr. Lesseps, his trip, and his friends; much of the geographical information; the last pages which deal with the Koryak. The present translation of Lesseps' original book is not considered entirely reliable. In volume 2 of this account, the author gives a Kamchadal-Russian English glossary; this has not been included in the Files. Field date: 1787-88. Evaluation: T-3].

17: Heizer, Robert F. Aconite Poison Whaling in Asia and America an Aleutian transfer to the new world. Smithsonian Miscellaneous Collections; Anthropological Papers of the U.S. Bureau of American Ethnology, Vol. CXXXIII, pp. 417-468. Washington: Government Printing Office, 1943.

1 map; 4 line drawings; bibliography; 7 unpaginated photographic plates. Pages processed 421, Parts 1-4; 445, Parts 1-2.
Yale: A52.72.V.133.

[CMC: The use of aconite poison in whaling by various peoples in the circum-Pacific area is discussed in this scholarly essay with a view to presenting new evidence bearing on the problem of the interchange of culture between Asia and America via the Aleutian Island chain. Only the page dealing specifically with Kamchadal whaling has been included in the Kamchadal file. For information relating Kamchadal customs to those of other Pacific peoples, see the sections of Heizer's essay extracted for the Aleut file (Aleut source 58). Heizer's information on Kamchadal whaling is entirely secondary, being based for the most part on Steller and Krashenninikov. Field date: no date. Evaluation: E-3],

18: Yarmolinsky, Avrahm. Kamchadal and Asiatic Eskimo Manuscript Collections. New York Public Library, 1947.

Pp. 16; frontispiece; bibliography.

Yale: Xf551. 947y.

[CMC: Yarmolinsky has edited three of the Kamchadal folktales recorded by Waldemar Jochelson when he headed the ethnological section of the Riabouschinsky expedition to Kamchatka and the Aleutian Island in 1910-11. The text of these folktales Yarmolinsky has extracted from the Jochelson manuscripts now owned by the New York Public Library. For further information on the manuscripts and on Yarmolinsky's editing methods, see category 114, this source, pp. 3-4. Yarmolinsky's article also reports on Bogoraz's manuscripts dealing with the Asiatic Eskimos, but this information is not included in the Kamchadal File. Field date: no date. Evaluation: L-4].

22: Guillemard, F. H. H. The Cruise of The Marchesa to Kamschatka and New Guinea. London: John Murray, 1886.

Pp. xiv, 284; frontispiece; preface; 52 line drawings; 5 maps; 2 appendices; index. Pages not processed: 1-65, 152-154, 156-158, 183-185, 187-208, 218-223, 229-234, and 235-284.

Yale: Eeg. 883. v. 1.

[CMC: Guillemard, a doctor and a fellow of the Royal Geographical Society and of the Zoological Society, etc., cruised with the Marchesa through southern Asiatic waters to Japan. The schooner yacht left Yokahoma for Kamchatka July 29, 1882 and returned to Japan from the north on October 6 of the same year. Landing at Petropavlovsk, Guillemard travelled overland to the headwaters of the Kamchatka River and then floated down the river to its mouth, where he was met by his ship. Detailed geographical and naturalistic information on Kamchatka has been extracted from Guillemard's lively account of the Marchesa's cruise, but the good doctor has provided little ethnographic data. Some of Guillemard's chapter on the history of Kamchatka has been included, though not the sections dealing with Bering's voyages.

Field date: 1882 Evaluation: T-2

24: Lansdell, Henry. Through Siberia. Boston: Houghton, Mifflin and Company. 1882.

Pp. xxiii, 811; frontispiece; preface; line drawings; 6 appendices; bibliography; index. 15 pages processed.

Yale: Eeac. 879.

[CMC: Reverend Lansdell toured Russia in 1879, visiting prisons and distributing religious tracts. He spoke no Russian, and his trip was hasty. However, his account of his expedition includes some interesting bits of information on Kamchatka and the Kamchadal. Field date: 1879 Evaluation: M-2].

27: Sauer, Martin. An Account of a Geographical and Astronomical Expedition to the Northern Parts of Russia, . . . by Commander Joseph Billings, in the Years 1785 to 1794. London: T. Cadell, jun. and W. Davies, 1802.

Pp. xvi, 315; frontispiece, preface; 47 illustrations; 2 maps; appendix; index. Only 44 pages processed.
Yale: Eeac. 785S

[CMC: Martin Sauer was secretary and translator for the Billings expedition to north-eastern Siberia and the various islands between Russia and North America. The expedition, which lasted from 1785 to 1794, concentrated its exploratory work in Siberia on the area around the Kolyma River (or Kovima, as Sauer calls it) and on the Chukchee Peninsula, but between 1789 and 1793 Kamchatka was often used as a winter base between exploratory voyages. On this basis, Sauer includes in his travel account some geographical information on Kamchatka and some very sketchy and questionable ethnographic data on the Kamchadals.
Field date: 1789-93. Evaluation: T-2.]

28: Sarytschew (Sarychev), Gawrila. Account of a Voyage of Discovery to the North-east of Siberia, the Frozen Ocean, and the North-east Sea. Vol. I. London: Richard Phillips, 1806.

Pp. iv, 70; engravings. Only 16 pages processed.

Yale: Eeac. 785Rg.

[CMC: Sarytschew (Sarychev) was one of the officers on the Billings expedition to northeast Siberia and the adjacent American coast in 1785-94. In 1789-90 while wintering in Kamchatka between exploratory trips, Sarytschew made a few observations on Kamchatka and the Kamchadals, and these tidbits have been included in his account of the expedition.
Field dates: 1789-90. Evaluation: T-1.]

29: Cochrane, John Dundas. Narrative of a Pedestrian Journey through Russia and Siberian Tartary, from the Frontiers of China to the Frozen Sea and Kamtchatka; performed during the years 1820, 1821, 1822, and 1823. London: John Murray, 1824.

Pp. xiv, 564; preface; 2 maps. 65 pages processed

Yale: Edb. 820b.

[CMC: During his trip by foot, horseback, and sleigh through Siberia in 1820-23, Cochrane, a Captain in the British Navy, spent eleven months in Kamchatka, two months being devoted to making a hasty tour of the peninsula, while the remainder of the time was spent in Petropavlovsk acquiring a Kamchadal wife. Cochrane's few chapters on Kamchatka and the Kamchadals (the end of Chapter IX, and Chapters X and XI) are devoted largely to decrying the abuse of the Kamchadals by the Russians and the Russian government. The pages of the table of contents listing these chapters are missing from Yale's copy of the book; hence none of the table of contents has been included in the Files. Field dates: 1821-22. Evaluation: T-2]

31:Debets

Kamchadal
Chukchee

111, 116

/For text copy and bibliographic data on 31:Debets see Chukchee file,31:Debets.--
Analyst/

DeWindt, Harry. Siberia as It is. London: Chapman and Hall, 1892.

Pp. xxiv, 504; frontispiece; 29 line drawings; 7 appendices.

Yale: Eeac. 891D.

[CMC: This report on the Russian prisons and on the Siberian exile system is based in part on extensive reading and in part on a trip to Russia in 1890. The trip was made solely to inspect the prisons, and it extended only as far east as Tomsk. DeWindt includes a few ethnographic notes on the Kamchadal in Chapter VII, but these are obviously second-hand, and they also do not seem very reliable.]

Ditmar, Karl von. Reisen und Aufenthalt in Kamtschatka in den Jahren 1851-1855. Beiträge zur Kenntniss des Russischen Reiches und der Angrenzenden Länder Asiens, Ser. 3, Vol. VII. St. Petersburg: Kaiserlichen Akademie der Wissenschaften, 1890.

Pp. x, 867; frontispiece; 2 maps; 32 line drawings; index.

Yale: A41.50.III.7.

[CMC: This book contains merely passing references to the Kamchadals and other ethnic groups, but it provides excellent, detailed information on the geography of Kamchatka, particularly on the topography and geology of the area. Making careful measurements and taking minute notes, Ditmar visited all of Kamchatka except the southern tip of the peninsula: in January 1852 he travelled along the valley of the Kamchatka River as far as Nizhne Kamchatsk; in the summer of 1852 he took a boat trip along the peninsula's east coast from Petropavlovsk to the mouth of the Kamchatka River, returning via this river to Petropavlovsk; in the summer of 1853 he travelled by horseback along the west coast of Kamchatka from Lesnaya to the Bystraya River and then across the peninsula via Nachiki to Petropavlovsk; and in the summer of 1854 he toured the area around Avacha

Ditmar, Karl von

Bay, exploring Avacha Volcano and the row of volcanos east of the Kamchatka River. This book, based on Ditmar's original journal of his Kamchatka travels, reports Ditmar's trips day by day; it does not present Ditmar's findings in any organized form. The book, though excellent, was not included in the file because of its lack of ethnological information.]

Golder, F.A. Bering's Voyages: An Account of the Efforts of the Russians to determine the Relation of Asia and America. Vol. II. New York: American Geographical Society, 1925.

Pp. xi, 290; 23 illustrations; 9 maps; 2 appendices; bibliography; index.

Yale: Eeac. 725G. v. 2.

[CMC: This edited translation of Steller's journal contains only passing references to the Kamchadal. It deals primarily with Bering's voyage after he had left Kamchatka. Therefore, it was not processed for the Kamchadal file].

Kuzmishchev, Pavel. Zamechanie o Kamchamskom narechii, prinadlezhsashchee k sobraniiu osobenniukh slov, upotrebliaemykh v Kamchatke (Remarks on the Kamchatka Dialect, referring to the Collection of Special Words used in Kamchatka). Moskvitianin, 1842, No. 6, pp. 246-254. Moskva: Universitetskoĭ Tipografii, 1842.

Yale: A90. M881. 1842(6.

[LSS: In the five years that the author spent in Kamchatka, he collected a large glossary of words used by the Russian population of the peninsula. Their dialect, he says, is based primarily on Russian words to which they have attached new meanings and it is these words that he discusses in this article. The dialect also includes, however, Russian words that have become obsolete in Russia proper and, especially for words expressing emotion, some Kamchadal words; this last group are not covered in this article. As a companion to this article, there is an article by the same author in Moskvitianin, 1842, No. 2. Neither of these articles were translated for the Files although they have been used to identify words used by other writers on Kamchatka.]

Niedieck, Paul. Cruises in the Bering Sea. London: Rowland Ward, 1909.

Pp. xv, 252; frontispiece; preface; 75 photographic plates; 55 photographic text figures; appendix; index.

Yale: Eeac. 906Ng.

[CMC: Niedieck went to Kamchatka in 1906 solely as a sportsman. Consequently, his account of his trip, although full of exciting bear hunts and harrowing shipwrecks, contains only occasional ethnographic ramblings, and these are based almost entirely on second-hand information. Niedieck's geographic information consists for the most part of expostulations on the difficulties of sailing a lifeboat along Kamchatka's rocky coast.]

113, 773 RY3 Kamchadal RY3

(For complete translated texts of Kamchadal myths see 1: Jochelson, RY4 Koryak, category 116, pp. 327-340.)

113, 13 Kamchadal RY3

/For data on the physical geography, geology, climate, flora, fauna and soil of Kamchatka, see 58: Berg, Rl Soviet Union, cat. 116, pp. 335-344. --Analyst/

[For information pertaining to the Kamchadal language, see 22: Matthews, R1 Soviet Union, category 116; p. 7.]

5: Jochelson A-5 (1910-11) 1928 Kamchadal

PREFACE

121 In 1925 the Carnegie Institution of Washington published my report, *Archæological Investigations in the Aleutian Islands*. The present work deals with the archæological investigations in Kamchatka, based on fieldwork conducted by the author in 1910–1911 at the expense of the late F. P. Riaboushinsky, Moscow banker, and under the auspices of the Imperial Russian Geographical Society. Both works form a part of the results of the author's studies as a leader of the Ethnological Division of the so-called Kamchatka Expedition, and may be regarded as publications, in English, of the Russian expedition. The reasons for the study of the Aleutian Islands by the Ethnological Division of the Kamchatka Expedition are given in my work *Archæological Investigations in the Aleutian Islands* (page 2).

113 The leaders and members of the other divisions of the expedition, who worked in Kamchatka only, are still working out their material. The following publications have appeared in Russian. Professor P. J. Schmidt, member of the Russian Academy of Sciences and leader of the Zoological Division, published the first volume of *The Zoology of Kamchatka*, Moscow, 1916 (1–432 pages, 4°). Professor V. L. Komarov, member of the Russian Academy of Sciences and leader of the Botanical Division, published the first volume of *The Vegetation of Kamchatka*, Moscow, 1912 (1–458 pages, 4°). Dr. V. A. Vlasov, the chief of the Meteorological Bureau of Moscow and leader of the Meteorological Division, published Volume I, Part 1, *The Climate of Kamchatka;* Part 2, *Kamchatka's Waters*, Moscow, 1916 (I–VII, 1–370 pages, 4°).

The above Russian publications of the Kamchatka Expedition were not written by the division leaders alone, but there are also contributions by their assistants, fifteen in number, specialists in different branches of zoology, botany, geology and meteorology.

The leader of the Geological Division, the mining engineer and member of the Geological Survey of Petrograd, S. A. Konradi, has published only a brief account of his investigations of the Kamchatka volcanoes. After the revolution of October 1917 in Russia he proceeded to Prague, Czechoslovakia, where he now lives.

113 The following material of the writer has not yet been published: grammars on
128 the Aleutian and Kamchadal languages, and material on the folklore, history, anthropology, ethnology and sociology of the Aleut and Kamchadal. A handbook by the writer on the anthropology and ethnology of the peoples of Asiatic Russia and adjacent countries is now in print by the American Museum of Natural History in New York, and a volume on the Yakut people of Siberia (prehistory,

113 history, anthropology, language, folklore, ethnology and sociology) is now in preparation for the publications of the American Museum.

128 The specimens described in this book are on exhibition in the Central Museum for Ethnography (former Count Rumiantzev's Museum) in Moscow.

128 Acknowledgment is made to Professor B. M. Sokolov, the Director of the Central Museum for Ethnography in Moscow, and his assistant, Dr. B. S. Shukov, who supervised the work of illustrations; to the mineralogist, Professor A. G. Titov of the Moscow University, who determined the stone material for implements and weapons; to the scientific collaborator of the Central Museum, Madame E. I. Goryunova, and the artist, Mr. Gutentag, who made drawings from specimens of the Kamchatka collection; to the photographer of the Central Museum, Mr. P. N. Bashirov, for the photographs taken of specimens in the Central Museum.

Mr. N. N. Krijanovsky of the staff of the American Geographical Society in New York made drawings of the map showing the distribution of the palæolithic, neolithic, bronze and iron stations in Northern Asia and the map of Kamchatka Peninsula.

Mrs. Jochelson, as a member of the Ethnological Division of the Kamchatka Expedition, assisted me in excavating ancient Kamchadal village sites and in taking photographs during our fieldwork. As a Doctor of Medicine she made herself useful by treating the numerous Kamchadal patients.

Finally the author is under obligation to the American Museum of Natural History in New York for assistance in clerical work and for putting at his disposal office room while writing this report.

WALDEMAR JOCHELSON.

American Museum of Natural History,
New York, March 27, 1928.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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2: Schrenck--269 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu ABC

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with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

2: Schrenck--407 (1854-1856) 1881-1895 RX2 Gilyak
Historical Manchuria AG2
Feudal Japan AB2
Kamchadal RY3

H.M. 101 174 /192/ At the same time, however, he also calls attention to the fact that if in the place in the Rubruquis at which the Taule and Manse peoples are mentioned (1) "Taule" is taken to stand

H.M. [113]

1. Marthe, "Taule et Manse" (Zeitschrift der Gesellschaft für Erdk. 475 ff). The passage concerned in the Rubruquis runs: " "Magister W. told me that he himself had seen messengers of certain peoples who call themselves Taule and Manse, who live on islands where the sea around freezes in winter so that then the Tatars are able to cross over to them" /translated from the Latin/.

for "Caule," that is, Kaoli, meaning Korea, it follows that the Man-dse were found in or near Korea even before Kublai Khan's colonies, to which the Russian sources want to trace back the introduction of this name in the Ussuri region. Along with Marthe, however, we shall naturally leave the final solution of this question to the historians and Sinologists.

F.J. 101 121 It remains for us to discuss the names customary among the Amur peoples for the third of the East Asiatic civilized peoples with whom they come in contact, the Japanese. As is well known, Steller (2) reports that the Kamchadal or Italmen call

K F.J. 101 439 K 192 [113]

2. Beschreibung von dem Lande Kamtschatka /Description of the Kamchatka Region/, pp. 3, 249, 320.

the Japanese "Sühsaman" or "Sühsemen," and they do this, as is expressly noted by him, because the Japanese brought them the first iron needles, whereas up to this time they had made them for themselves out of sable bones; in the Italmen, and in all dialects, the needle is called sühse. Krascheninnikof (3)

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3. "Opisanie zemli Kamchatki /Description

2: Schrenck--408 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Feudal Japan A82
Kamchadal RY3
Goldi RX3
Southeast Siberia RX1

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of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[2]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

[2] [Footnote "(5)" appears on p. 409--Analyst]

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

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7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted [417]

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachtschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

342 [364] [417] [101]

/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114 10 [113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

G /353 cont./
352 running under it and therefore is better suited for the feet than
354 for the head. There is another justification for this custom in
513 the winter houses of the Amur peoples. If one lies with his
516 head against the wall, he exposes himself so that the rats,
171 which are exceedingly abundant in these houses and which al-
[136] ways run along the walls, would be constantly running over the
G face. This alone, however, would not make the Gilyak refuse
[184] to allow even a stranger to assume this position on their lang,
[199] if superstition did not demand strict observance of the tradi-
tional custom, and afraid of any violation of it, no matter by
G whom, as misfortune for all the inhabitants of the house.
342 Due to the lack of historical data, it cannot be deter-
171 mined when the Chinese winter-yurt reached the Gilyak on the
Amur and, gradually spreading downstream, supplanting the
earth yurt, reached the Amur-Liman, the coast of the Sea of
G Okhotsk, and the Liman coast of Sakhalin. In the reports of
[175] Pojarkof and Nagiba, who spent the winter among the Gilyak
at the mouth of the Amur and along the Sea of Okhotsk in 1644-
45 and 1652 (3), there are, unfortunately, no hints which would

3. See pp. 216, 219 ff. above.

K permit conclusions about the nature of the Gilyak houses at that
342 time. In the case of another Paleo-Asiatic people, the Kam-
177 chadal, we see the original earth-yurt completely disappear
175 before an imported, foreign type of house construction within
the short space of about 50 years. At the time of Krascheninnikof
and Steller (in the forties of the previous century), all the
Kamchadal still lived in earth yurts of the type described above.
Even in 1779, when Clerke, the successor of Cook on the latter's
third voyage, visited Kamchatka, at least the south of the
peninsula, between Peter-and-Paul's Harbor and Bolscherezk (4).

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[113]

4. Tagebuch einer Entdeckungsreise nach der Südsee in den Jahren 1776-1780 unter Anführ. der Capitäne Cook, Clerke, Gore und King, transl. by J.R.Forster, Berlin, 1781, p. 333.

G /358 cont./
343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

G /359/ Like the earth yurt, all the pile buildings mentioned above, the summer yurt, the storehouse, etc., are original, peculiarly Gilyak structures which the neighbors of the Gilyak, the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to Krascheninnikof's and Steller's descriptions and an illustration given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan by the Russians (1). The Eskimo of the American Northwest along

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K [175] [342]
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K [113]

1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

K [132]
K [178] [179]

Ainu A86
Kamchadal RY3

A 304 175 [113]

/419 cont./

3. (cont.)
slovar' /Ainu-Russian Dictionary/, supplement to Uchen. Zap. Imp. Kazansk. Univ. 1875g., p. 33.

A 304 184

Rinsô (1808) (4) already noticed that the women there /420/ tattoo

4. "To-tats ki ko" (Siebold, Nippon, VII, p. 182).

themselves more feebly than those from Jesso and that in general this custom becomes less frequent there as one goes farther inland, that is, farther north from Aniwa. Finally, the same custom prevails among the Ainu of the Kurile Islands, and, indeed, according to Krascheninnikof (1), it extends to both sexes

A [113]

1. Krasheninnikov", "Opisanie zemli Kamchatki" (Polnoe sobranie putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 258).

there, but the men content themselves with blackening the middle of the lips, while the women tattoo themselves all around the mouth and also on the hands and arms almost up to the elbows.

K 302 [304]

It is very noteworthy that the ancient Italmen on Kamchatka, though surrounded by tribes among whom tattooing was a matter of course, did not themselves adhere to this habit, or bad habit, but only painted themselves white and red, which, before the arrival of the Russians, they practiced very heavily, "like monkeys," according to Steller, but later "much more moderately, in the fashion of the Cossack women" (2).

K [113] [386]

2. Steller, Beschreib. von dem Lande Kamschatka, p. 300. Krascheninnikof, op. cit., p. 68. To paint with white, the Italmen used either decayed wood or a naturally calcined mica which occurs here and there

G /449 cont./ Mamia Rinsô (4),
323 to be sure, reports about the Ainu of southern Sakhalin that they
171 make earthenware vessels, and, to be sure, of two kinds, the
A one of about six to seven inches in diameter with ears on two
323 sides, tojes'ju, i.e., earthen pans, the other called kamui'sju,
[177] i.e., divine pans, but one cannot fail to recognize the recent
Japanese origin of this art. In the seventeenth century, when
A Vries and his companions discovered Jesso and the nearby Kurile
[175] Islands, they saw the inhabitants of them eating from lacquered
[172] wooden bowls /450/ and quadrangular troughs (1), and just such
[415]

A [113] 1. Siebold, Aardr. en volkenkund. toelicht. tot de ontdekk. van Vries /Geographical and Ethnographical Explanations from the Discoveries by Vries/, P. 108.

bowls, but no earthenware vessels, are among the articles that Poljakof found, besides skulls and bones, in old Ainu graves on Sakhalin and presented to our museum. Concerning the ancient
G Kamchadal, one finds, to be sure, in the report of the Cossack
321 Atlassof published by Witsen (2), the information that they
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323
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[113]

2. Noord en Oost Tartarye, ed. of 1705, p. 673.

manufacture for their own use earthenware and wooden vessels, but the former are more than questionable. Steller and
K Krascheninnikof saw only wooden vessels among them, and
[172] Ditmar (3), while digging on the sites where their yurts had once

K [113] 3. "Reisen und Aufenthalt in Kamschatka in den Jahren 1851-1855 /Travels and Residence in Kamchatka in 1851-1855/" (Beitr. zur Kenntn. des Russ. Reiches, third series, Vol. VII, p. 246).

stood, only once found, among numerous stone tools, a small piece of earthenware, which crumbled in his hands because it had not been fired, or at most only slightly, and which he thought was a train-oil lamp shaped by hand.
4. Op. Cit., p. 184.

Ainu ABG
Kamchadal RY3
Northeast Siberia RY1

A /487 cont./
492 oppression of Japanese domination weighing down upon them and
493 paralyzing the general life of the people.
698 It is known from the detailed descriptions by Steller (2) and

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[113]

2. Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, pp. 132 ff, 370 ff.

Krascheninnikof that the Italmen on Kamchatka since time immemorial have used dogs for traveling, for which they selected and trained the largest and strongest of them and built sleds of a
K [171] peculiar form and construction. Like the Gilyak sleds, the Kamchadal sleds, too, were characterized by their extreme lightness, flexibility, and durability; /488/ but whereas the former are shallow and low, the latter had a relatively high-placed and deep sled-basket, on which the dog-driver usually sat side ways and
K 493 only at times astride. Later the Russians in Kamchatka adopted
171 this type of sled and have them even today (1). Besides them,
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1. Several sleds of this type brought from Kamchatka in the previous century have been preserved in the Anthropological-ethnographic Museum of the Academy.

however, they were also, even in Steller's time, and especially for the transportation of heavier loads, using the above-mentioned long and broad-soled dog-sleds or narten (2) such as are also

2. Steller (op. cit., p. 370) calls them "narden."

customary elsewhere in Siberia. They may therefore have already
NS 492 been familiar with them before their arrival in Kamchatka. There
114 is no reason to assume with Matjuschkin (3) that the Russians first
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[113]

3. Vrangel', Putesh. po siev. ber. Sibiri i po Ledov. moriu, Part II, p. 110, footnote *.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

122 they were assisting the professors, and in time be qualified to fill up their vacancies. The author,
114 *Stephen Krasheninicoff*, one of the above-mentioned six, was born in *Moscow*, and had his first education in the Latin school of the convent of our Lord, where he learned the principles of rhetoric and philosophy, and excelled most of his school-fellows, both in capacity and application to his studies. Though he was principally employed in the study of natural philosophy, yet he shewed such inclination to geography and civil history, that in the Year 1735 he was employed in these different enquiries at such places as the
122 professors themselves did not visit. In the year 1736 the members of the academy, being at *Yakutski*, were informed, that the sea-officers had made but a small progress in their discoveries, and that they would not be able to reach *Kamtschatka* in several years; the professors therefore having many useful observations to make in *Siberia*, thought proper to send before them a person, on whom they could depend, to prepare for their reception at *Kamtschatka*. To this trust Mr. *Krasheninicoff* was appointed, and at the same time was furnished with proper instructions and directions. Some accidents prevented the professors from arriving at *Kamtschatka*, excepting the professor of astronomy; the others were ordered by the senate to return to St. *Petersbourg*, and in their way to make further observations in *Siberia*. Thus all enquiries

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

122 were informed of, they ordered him to join them, and return with them to *Petersbourg* in the year 1743. Mr. *Steller*, in his return from *Siberia*, died of a fever the 12th of *November*, 1745, in the town of *Toumen*.

128 When Mr. *Krasheninicoff* had given the Academy of Sciences a full report of all his obſervations at *Kamtſchatka*, and had likewiſe received all Mr. *Steller*'s papers, it was thought proper to join theſe two works, and to commit their compilement to the perſon who had the greateſt ſhare in the merit of the diſcovery. This is the origin of the following deſcription of *Kamtſchatka*; a country never yet deſcribed by any author of credit, and where the manners and cuſtoms of the inhabitants are beyond meaſure ſingular and
114 uncommon. It is to be wiſhed that ſuch writers as have hitherto given us accounts of new-diſcovered countries had taken the ſame pains to inform themſelves that this writer hath. The author was advanced in the year 1745 to be an adjunct of the Academy of Sciences, and in the year 1750 was made profeſſor of botany and natural hiſtory. He died in the 42d year of his age, when the laſt ſheets of his book were printing off; and was one of thoſe few whom perſonal merit alone, and no advantages of birth or fortune, contributed to raiſe.

102 For the better underſtanding of the geographical
128 deſcriptions, it was thought proper to add two maps of

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding,
177 agriculture, etc.) show a marked increase in population. But these groups do not
609 include the Kamchadal. On the other hand the latest investigators of Kamchatka, the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Vulcane, Bären und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–180. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 40–62 (in Russian).

1. [i.e., a decline in population due to Syphillis, etc. --Analyst]

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

114 177 459 172 325

In the beginning of the seventeenth century the Japanese Government prohibited all navigation beyond its home waters, and before the Russians conquered Kamchatka the Kamchadal were not acquainted with the use of metals. However, there is no doubt that some iron instruments and other Japanese goods had reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

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It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.

[2] According to Krashenninikoff (vol. II, p. 49, in Russian) the Kamchadal called a needle "shish" and the Japanese as procurers of needles "shishaman."

[Pp. 22 - 36 have not been included in the file -- Analyst]

CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

114 252 323 415

At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times. Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones, and there is nowhere in the writings of these authors a reference to clay vessels. Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Pale-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.
[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I–II, 1819, St. Petersburg (in Russian).
[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1887, p. 130.
[4] See R. Torii, *Étude Archéologiques et Ethnologiques: Les Ainos des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Kluchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851–1855*, p. 326, St. Petersburg, 1860, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thalichtys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1926, p. 12, in Russian).

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

7:Lesseps T-3 (1787-88)1790 Kamchadal

609 held in any high esteem by them; they had even so bad an opinion of us, that it was with difficulty they were brought to believe what had been told them of the politeness and cordiality of the crews of the French frigates to the inhabitants of Saint Peter and Saint Paul. In proportion however as they heard their countrymen extol our conduct, their prejudice grew weaker. I endeavoured by my conversation and behaviour to destroy it entirely. I dare not flatter myself to have succeeded; but it appeared to me that a complete change at last took place in their sentiments respecting us.

609 The disadvantageous impression which
114 they had imbibed of the character and genius of our nation, originated in the perfidy and cruelty exhibited in the person of the famous Beniowsky in this part of the peninsula. This slave called himself a Frenchman, and acted like a true Vandal.

His

7:Lesseps T-3 (1787-88)1790 Kamchadal

114/175 His history is known. During the troubles of 1769 he served in Poland under the colours of the confederates. His intrepidity induced them to make choice of him to command a medley troop of foreigners, or rather robbers, like himself, whom they kept in pay, not from choice but necessity. With Beniowsky at their head, they ransacked the country, massacring every one they met. He harassed the Russians, to whom he was as formidable as to his own countrymen. They soon felt the necessity of getting rid of so dangerous an enemy: he was taken prisoner, and it may be supposed they adopted no very lenient measures respecting him. Banished to Siberia, and afterwards to Kamtschatka, his fiery and vindictive genius accompanied him. Escaped from the mountains of snow, under which the Russians supposed him to be buried, he suddenly made his appearance at Bolcheretsk with a troop of exiles, to whom he had imparted a spark

of

7:Lesseps T-3 (1787-88)1790 Kamchadal

114/175 of his own audacity. He ſurpriſed the garriſon and took poſſeſſion of the arms; the governor, M. Nilloff, was killed by his hand. There was a veſſel in the port; he ſeized it: every one trembled at his aſpect; all ſubmitted to his will. He compelled the poor Kamtſchadales to furniſh him with the proviſions he demanded; and not content with the ſacrifices obtained, he gave up their habitations to the unbridled licentiouſneſs of his banditti, to whom he ſet the example of villainy and ferocity. He embarked at length with his companions, and ſailed, it was ſaid, towards China, carrying with him the execrations of the people of Kamtſchatka. This ſuppoſitious Frenchman was the only one they had yet ſeen in the peninſula; and from ſuch a ſpecimen of our nation, they certainly could not love, and had ſufficient reaſon to fear us.

000 M. Schmaleff quitted us at break of day, and

"Four Years Ago the Library [CMC: i. e., the New York Public Library] acquired the Aleutian manuscript texts recorded by the late Waldemar Jochelson when he headed the ethnological section of the scientific expedition sent by the Russian Geographical Society to the Aleutian Island and Kamchatka. With the assistants Jochelson reached the peninsula in the summer of 1910 and spent the following winter studying the language and culture of the aborigines, the Kamchadals, or, as they call themselves, Itelmens (='men'). He recorded a number of texts in Kamchadal and wrote several papers on the Kamchatka and its natives, which have remained largely unpublished. Last year all these manuscripts came into the possession of the Library.

Texts in Kamchadal

The studies, 129 typewritten pages in all, are couched in rather bad English. They include some notes on the geography and history of the region, but have to do chiefly with the Kamchadals, their social institutions, folklore and shamanism, as well as the various elements of their material culture, such as occupations, crafts, dwellings, food, clothes, harness, tools, weapons, armor. There are also some observations on Kamchadal diseases and folk medicine. The papers are somewhat disjointed and repetitious and give the impression of preliminary notes for a monograph. They are supplemented by some fifty photographs, presumably taken

during the expedition of 1910-11 and intended to illustrate the work that Jochelson had in preparation. They depict aborigines: men, women and children, separately and in groups, as well as landscapes, village streets, homes, dogs, products of native crafts. Three of these photographs are reproduced herewith.

Jochelson's studies include some linguistic material: a few observations on the Russian dialect spoken by the natives, a list of Itelmen terms of kinship, paradigms of Itelmen nouns, pronouns and verbs, and a sketch of the phonology of the language."

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i. e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya, s. v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenán anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

18: Yarmolinsky--4 L-4 (no date) 1947 Kamchadal-1-2
116, 114, 126

"This circumstance lends particular interest to the Itelmen texts which are part of the newly acquired manuscript collection. There are in all forty-one of them. With the exception of one item - a brief account of a trip from one village to another by a native, apparently an informant of Jochelson's, they are in the nature of folk tales. The texts, in the original Kamchadal, all typewritten, are provided with an interlinear literal translation, in Jochelson's hand, and with a free rendering, both in an English of sorts. The free translation is often abridged. The editing of the texts must have been carried out by the Russian ethnographer in this country, where he settled in 1922. (1)

1. A group of Kamchadal tales was recorded about 1900 by another Russian ethnographer, Waldemar Bogoras, while he was doing field work in North-Eastern Siberia as a member of the Jesup North Pacific Expedition. He placed these texts at the disposal of Jochelson, who published a free English rendering of nine of them in his monumental monograph on the Koryaks (American Museum of Natural History. Memoirs, v.10, Leiden-New York, 1908, p. 327-340). The whereabouts of the original texts is unknown. Some of these tales are variants of the stories recorded by Jochelson. The text of one Kamchadal tale, with a word-for-word Russian translation is appended to S.N. Stebnitzki's Itelmen grammar [CMC: Itel'menskiĭ yazyk. (Institut

narodov Severa, Leningrad. Nauchno-issledovatel'skaya assotziatziya. Trudy po lingvistike. Moskva, 1934. 4°. t. 3, p. 85-104)]

Below [CMC: see category 539] are given versions of three of the more attractive folk tales. The translation is based on Jochelson's word-for-word rendering. This occasionally fails to convey a satisfactory meaning, and the present writer, while seeking to adhere to the original as closely as possible, felt justified in deviating from Jochelson's interpretations."

22: Guillemard T-2 (1882) 1886 Kamchadal

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lower part of the Kamschatka averaged, I should think, about twelve or fifteen pounds; the extreme weights, at a rough guess, being eight and twenty-five pounds.

The Kisutchi is the last of all the salmon to ascend the rivers. It arrives about the 10th or 12th of August, and in consequence is in good condition when most of the other species are uneatable. In the middle of September we found the majority of them clean fish, and it is not till the following month that they usually acquire the blood-stained tinge of the under surface, and the extraordinary snout to which I have just alluded. The latter presents a smoothly rounded protrusion about as large as a sixpence, over-hanging the lower jaw, and giving the fish a very comical expression. We learnt from our two hunters that the Kisutchi were caught until November, and Krasheninikov tells us[1] that they are found "during the whole winter in those springs that run into the Kamschatka from the south," which is possibly due to the fact that the water of some of these streams is warm. It appears to be a generally-distributed species, occurring in all the rivers of the peninsula. The flesh is very pale, almost white.

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6. *Salmo callaris* (Pall.) is the Goletz or Gultsi of the natives. Krasheninikov says[2] that "the largest fish of this species, which lives sometimes five or six years, comes from the sea into the River Kamschatka, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almost as big as the *Chavitsi* (Tchervitchi), though it seldom weighs more than twenty pounds. They are found likewise very large in the Bistroy River; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour,[3] have large teeth, and the lower jaw is crooked with a knob: it seems indeed of a different species. Those of three years old, which have been one year out of the sea, have a long head, are of a silver colour, with small scales, and

[1] "The History of Kamschatka," p. 148.
[2] *Op. cit.* p. 149.
[3] Steller also says, "auf dem Bauch und Flossen Zinnober-roth."

22: Guillemard T-2 (1882) 1886 Kamchadal

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small red spots; and such as have been two years out of the sea are round and longish, with small heads; and their flesh, which is reddish white, is hard and well tasted. With regard to their size, the first year they are long and small; the second they grow more in breadth than in length; the third the head grows considerably; and the fourth, fifth, and sixth years their breadth and thickness increases greatly: in the fourth year also the lower part to the snout becomes hooked."

Pallas adds that "these fish enter the rivers from the Eastern ocean in great numbers . . . in order to hybernate, being still without spots. They are said to remain torpid during the winter in the

GULTSE (*Salmo callaria.*)

depths of rivers, in shoals of thousands, until at the return of spring they seek the sea again, from about the 10th to the 20th of May. They surmount cataracts of whatever height by leaping, and in the same manner escape from nets one fathom deep. They force their way into the Kuril Lake near the River Kamschatka,[1] notwithstanding a very high cataract, and hybernate in it in large numbers. Many remain for a long time in the rivers and lakes, but the greater number return in spring to the sea. When they come up from the sea they are without the red tint and spots, and shine with a silvery lustre; during the ascent they become gradually spotted with red, while they acquire a more or less red tint beneath the belly and on the fins, according to the comparative rapidity of the river currents."

Both the above accounts are very difficult to reconcile with that

[1] It is difficult to understand what lake is here meant. The Kuril Lake is at least 170 miles distant from the nearest point of the Kamschatka River.

22: Guillemard T-2 (1882) 1886 Kamchadal

114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

000 and whether boiled or fried in steaks, the fish has a delicacy of flavour that is rarely met with at a civilised dinner-table. But, of all methods of cooking it, one is pre-eminent in its excellence. Cleaned, split, and gutted, the salmon, which should be a small one, is impaled upon a Y-shaped forked stick, and placed half over the fire, so that it may be exposed to the occasional action of both smoke and flame. A certain amount of attention is necessary to see that it does not get too much of either, and care should be taken to turn it tolerably frequently. But if properly done—and, those who have tried it will bear me out—the dish is one fit for the gods, and loses nothing from the simplicity of the necessary apparatus.

We broke camp at noon on the following day, being within easy distance of Sherowmy, where we calculated on beginning our river journey. A heavy shower fell as we were striking the tents, wetting much of our baggage and our ornithological specimens before we could get them under cover, but the weather soon cleared, and we continued our march. Our long cavalcade proceeded in Indian file over the desolate and monotonous stretches of bilberry-covered open and stunted birch-thicket,—a type of country which, however exhilarating beneath a bright sun, is depressing to a degree under grey skies and driving rain. The wind held steadily from the west, however, and having made sure of the direction in which Sherowmy lay, we left the party, and turning our horses towards the river, devoted the remainder of the day to a search for bears. We had no sooner taken up our positions by the river-side than the wind shifted, fell light, and then shifted again, and all
114 hopes of getting a shot vanished. Of there being bears in the
136 vicinity we had abundant evidence, for the banks of the river were trampled in all directions with their fresh footmarks, among which it was easy to recognise those of an old animal of great size.[1] The

[1] Some of these Kamschatkan bears are enormous. One skin in my possession measures eight feet three inches in length, in spite of the greater part of the head being wanting.

22: Guillemard T-2 (1882) 1886 Kamchadal

114 remains of many half-eaten fish lay on the banks. The bears are
136 said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 Sherowmy, or Sherowm,—for the Kamschatkans are fond of
144 clipping the exuberance of their words, and turn Kamakoffskaya
157 into Kamaki,—is a pretty little village of nine houses and forty-
161 three inhabitants, situated on a branch of the Kamschatka River
177 close to its junction with the latter. To the south lie a few acres
361 of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

000 we paddled out into the current, and in another ten minutes the village was lost to view.

114 In Findlay's "North Pacific Directory" it is stated, though upon
135 what authority is not clear, that the Kamschatka River "is said to
136 be capable of admitting vessels of 100 tons about one hundred and fifty miles up the stream." This, however, is not correct, or at any rate is very misleading, for the river is beset throughout with sand-banks which in many places apparently lie completely across the stream. Thus, opposite Kluchi village there was only an average of seven feet of water, while both above and below we got depths of twenty or thirty feet and more. The sand-banks also are very unexpectedly placed, and the navigation of the stream by a large vessel, even if possible, could only be accomplished by the aid of an elaborate system of buoys, which, I need hardly say, is not likely to be instituted for many a year to come. From some versts above Kluchi to the mouth of the river, except at the Tchoaki or narrows, to which I shall have occasion to refer presently, many islands are formed by the bifurcation of the stream, some of them of large size, and the river increases considerably in breadth. Opposite the village it is said never to freeze entirely over, a fact the people attribute to the existence of hot springs in the river bed. They also told us that salmon remain here throughout the winter, though not in any great numbers.

Among these islands there appeared to be more duck than we had been lately accustomed to see in the lower part of the river, and we here obtained the Shoveller (*S. clypeata*) for the first time. Landing to replenish the larder at some small lakes towards the hour of sunset, we remarked both snipe and wild geese, neither of which we had previously met with, but it was too dark to dis-
000 tinguish the species. Verglaski followed us on occasions such as these with the stolid expression and steady gait he always affected. Nothing short of a bear, I believe, ever roused him to any less dignified pace than a walk, and as he slowly followed us, I had a lurking suspicion that he regarded our occupation as a rather

Ka our attention to tracing the existence of such similarities be-
144 tween the former type and the peoples who live in those parts of Asia lying beyond our boundaries. Resembling the Kamchatka type, combinations of a broad nose with a small size of the face are encountered in South China, Indo-China, Indonesia, on the Philippines and Formosa, and partly in Japan. However, because of the absence of data collected by the same method of observation, the comparison of the Kamchatka type with the south Asiatic Mongoloids becomes an extremely difficult problem.

000 One hundred and twenty-two male Korean inhabitants of the northern provinces of Korea, studied by me with the special purpose of making this comparison, turned out to be more closely related to the Reindeer Koryak and the Chukchee than to the Lamut and the Buryat. The average rating of the incline of their nostrils is 1.71, the protrusion of nasal wings--2.09. A considerable frequency of brown shades of skin coloring (55 percent of No. 10 and darker), moderately developed cheekbones, and small facial height (131 millimeters)--all these traits make for a greater similarity of the Korean and the Kamchatka types, even though this similarity is far from being complete. Specifically, the mandible diameter of the Koreans is not large (112 millimeters), the convex shape of the nasal profile is met more [Tables 1 and 2 on pp. 10-15 and part of pages 16-17 of the original text] [16] frequently than the concave shape. (2). However, from the point of view of racial com-

2. Scientific literature contains indications of the considerable breadth of the lower jaw of the aborigines of Burma.

position the Korean type evidently contains a north Chinese element, so that it cannot be looked upon as a characteristic representative of the south Asiatic Mongoloids.

Ka The difficulties that naturally arise in the course of the at-
141 tempts to organize large-scale anthropological research in
121 southeastern Asia compel us to shift our attention to the
114 craniological materials, especially since scientific literature contains good descriptions of the south Asiatic series. Unfortunately our museums are completely lacking in skulls
C which could be regarded as belonging to the representatives of
[764] the Kamchatka type. The custom of burning corpses, prevail-
Ko ing among the Koryak and among some Chukchee, prevents the
[764] collecting of such skulls. Nevertheless, a specific task of

Ka 141 121 gathering skulls somewhere in the area of the Chaun Bay must lead to fruitful results and may be regarded as one of the next tasks of our study.

114 3. Finally, we should not forget that the conclusion that there exists a profound anthropological difference between the Paleo-Asiatics and the American Indians has been made on the basis of very superficial scholarly ideas about the racial peculiarities of the native population of North America. Many peoples of North America (for example, the Northern Athabascan Indians) have generally remained uninvestigated and the scientific data available with regard to other peoples are confined in most cases to a few measurements and to the most sketchy kind of description. The existing craniometric data, insofar as they lack the most essential measurements, such as those of the nasal profile and of the face as a whole, are completely inadequate. It follows, therefore, that we should undertake special projects of studying craniological collections of the American museums.

Ka 174 4. Paleoanthropology of Japan may provide important leads to the study of the possible migration routes via islands into Kamchatka. If it is true that the ancient population of Japan was of the Ainu race, the route via the Kurile Islands is excluded in the case of both the Eskimo and the Kamchatka types. (3)

3. If we shall regard the Ainu type as an original Proto-Mongoloid form--a hypothesis which, though improbable, cannot yet be discarded.

[17] However, the paleoanthropology of Japan is so poorly developed (in spite of the relative abundance of material) that the hypothesis presuming a very ancient character of the Mongoloid elements encountered on the territory of Japan, and holding that at least one of the population types which inhabit Kamchatka may have penetrated there via the Kurile Islands may not be regarded as finally disproven.

000 As a result, the organization of the exploration of paleo-anthropological materials contained in the Japanese museums is also one of the next tasks of our future study.

5. In studying the problem of the continental migration route along the Okhotsk seaboard, we must define more accurately the outline of the area[1 [basic unit in biogeography] of the Eskimo type, which seems to skirt the northeast of Asia. With this purpose in mind, we shall in the nearest future investigate

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with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

2: Schrenck--270 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu AB6

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6. (cont.)
Islands south of Onekotan, Krascheninnikof gives a faithful translation of Müller's remarks, but for the northern ones, as well as for southern Kamchatka, he ignores them completely, since here he was able to rely upon his own experiences and observations, as well as Steller's. Later (Samml. Russ. Gesch., Vol. III, 1758 p. 79), Müller agreed with the assertions by Steller and Krascheninnikof and declared that it was nothing but "common usage" among the Russians on Kamchatka to call the inhabitants of the first island and of the mainland to the south of Bolscherezk "Kuriles," whereas they were nothing but Kamchadal with a different language dialectally.

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And they carried the same designation, in adjectival form, over to many localities in southern Kamchatka, as is shown by the names Kurilskoje /128/ osero, Kurilskij Ostrog located on an island in the lake named, Kurilskaja Lopatka, etc.

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As for the origin of the name "Kuriles" for the Ainu on the island chain to the south of Kamchatka, among the Russian writers since the days of Golownin it became, I might almost say, a custom to derive the name of the people from that of the islands, and the latter from their smoking volcanoes (kuryashchiyasya sopki) (1). Steller, however, has already

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1. Golovnina, Zap. o prikliuch. ego v" plienu u Iapontsev", v" 1811, 1812 i 1813 g., Pt. III, St. Petersburg, 1816, p. 158; A. Sgibnev", "Bunt" Ben'evskago v" Kamch. v" 1771 g. /The Revolt of Ben'evskii in Kamchatka in 1771/" Russk.

2: Schrenck--271 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu AB6
Kamchadal RY3

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1. (cont.)
Starina, 1876, March, p. 534). Polonskij ("Kurily."-- Zap. Geogr. Obshch. Po Otd. Etnogr., Vol. IV, 1871, p. 369) went even a step further in that he thought that the name derived from the smoking volcanoes were all the more likely preserved since to the approaching mariner these islands emerged out of the fog in which they were almost constantly wrapped, and thus seemed to be smoking themselves. This derivation of the name "Kuriles" is also repeated in Bickmore's article on the Ainu (Amer. Journ. of Science, May, 1868, p. 18). As an oddity I might give Tronson's assertion that the name Kuriles for the islands came from a lake of the same name (Kurilskoje osero) located in the south of Kamchatka, whose inhabitants had most likely emigrated to the islands (Tronson, Pers. Narrat. of a Voyage to Japan, Kamtsch., Siberia, Tartary, etc. in H. M. S. Barracouta, London, 1859, p. 158).

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Steller, however, has already pointed out that the name Kuriles customary among the Russians for the inhabitants of the like-named islands was connected with the name that the Italmen from Bolschaja reka to Lopatka give to this people and which sounds like "Kuschi" or "Kusi" (2).

2. Steller, op. cit., pp. 6, 7, 30.

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He himself, however, erroneously derives this latter name from a special way of dancing customary among this people, that "Kuschi" would mean something like "dancing" or "jumping" (3).

3. Steller, op cit., p. 248, note a.

2: Schrenck--408 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Feudal Japan AB2
Kamchadal RY3
Goldi RX3
Southeast Siberia RX1

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3. (cont.)
of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[7]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

[7] [Footnote "(5)" appears on p. 409--Analyst]

2: Schrenck--409 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Southeast Siberia RX1
Feudal Japan AB2
Kamchadal RY3
Ainu AB6

000 /192 cont./
"Ssissa" (5). In view of the lack of any contact between the Amur

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5. The Chinese traders on the Amur and Sungari use the same name for the Japanese. Even in the Sungari region Venault heard of a "Si-san" country to the north, which he hoped to reach on his trip down the Amur (1850). On the way, he was told by Chinese traders that they themselves never went to Si-san, but only traded with it through the mediation of the Jupi-tatse. On the basis of all the information that he had collected, he suspected that "Si-san" was the island of Karaftu (Sakhalin) (see his "Excurs. dans les parties intér. de la Mandchourie" -- Nouv. Ann. des Voyages, fifth series, Vol. XXX, 1852 [Vol. II], pp. 207, 215, 222, 224).

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In view of the lack of any contact between the Amur peoples and the Kamchadal and their completely different languages, the almost identical name that they have for the Japanese indicates that they must have taken it /193/ from the same source. And this source is easily found. It is the Ainu: for the Amur peoples, the Ainu of Sakhalin; for the Kamchadal, the Ainu of the Kuriles. Just as the one bridge, Sakhalin, leads from Jesso /Yesso/, the main island of the Ainu, to the Amur region, so the other bridge, the island chain of the Kuriles, leads from Jesso to Kamchatka. It is known from Japanese as well as European sources that the Ainu of Jesso have a similar name for the Japanese. In the description of Jesso written in the seventeenth century by the Japanese Kannemon and translated by Titsingh (1),

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1. "Jeso-ki, ou Descr. de l'île de Jesso," etc., compiled by the interpreter Kannemon and published in 1632; translated by Titsingh,

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

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[113]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

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1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojacht tschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

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/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114 10 [113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

/334 cont./

K 114 101

4. (cont.)
knew nothing of the Kamchadal. One can explain such a misunderstanding of Steller's remarks as happened to Gerland in part by Steller's antiquated style and in part by the frequently (and even at the place concerned, p. 8) exceeding faulty and incorrect punctuation in this publication of his work. As I have already pointed out at another place (Reis. u. Forsch. im Amur-Lande, Vol. II, p. 762, note 3), Pallas said of it that it "was printed from a rough draft and in the hands of the publisher (J.B.S.) became loaded with the most inexcusable copying and printing errors revealing a great ignorance (Neue Nord. Beytr., Vol. II, p. 255). One will be convinced of the accuracy of this opinion by Pallas on every page while reading Steller's work. For this reason I believe that the apparent difference in these two Koryak terms for the Kamchadal can be traced to merely a printing error. Steller also says that the sedentary Koryak along the Sea of Okhotsk are called "Nümala akalila," i.e., sitting, resting, by their countrymen who roam with reindeer. Could it be, however, that this "Nümala," like "Namalau," is also a reference to their subterranean dwellings?

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KK [101] [174] [342]

Some, the sedentary ones, of the Koryak, also a Paleo-Asiatic people, retained the earth yurt to this day, insofar as they have not already adopted Russian customs and hence also Russian dwellings, for example, according to Ditmar (5), /335/in particular

KK 342 178 177

KK [113]

5. "Ueber die Koräken und die ihnen sehr nahe verwandten Tschuktschen /On the Koryak and the Chukchee Very Closely Related to Them/" (Bull. de la cl. hist.-phil. de l'Acad. Imp. des sc. de St. Petersb., Vol. XIII, pp. 104, 107, 109; Mél. russes, Vol. III, pp. 8, 12, 16).

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

1: Krasheninnikov N-5 (1736-40) Kamchadal

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THE

HISTORY

OF

KAMTSCHATKA,

AND THE

KURILSKI ISLANDS,

WITH THE

COUNTRIES ADJACENT;

ILLUSTRATED WITH

MAPS AND CUTS.

Published at *Petersbourg* in the *Russian* Language, by Order of her IMPERIAL MAJESTY

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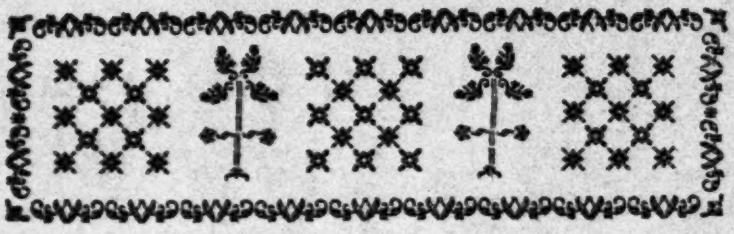
1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal



THE

RUSSIAN EDITOR's

PREFACE.

THERE is perhaps hardly any knowledge more pleasing than that which arises from accurate accounts of the variety of distinctions and divisions diversifying the face of the habitable globe, were we only to regard it so far as it gratifies our curiosity; but more noble purposes may be still effected by such informations. All who are employed in the management and superintendency of states and nations ought certainly to have an exact knowledge

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

of thoſe countries over which they preſide, eſpecially with regard to their ſoil and climate; what parts are proper for agriculture, or for paſture, and what are deſert; what rivers are navigable, or may be rendered ſo; what communication there is already, or may be, made, between them; what beaſts, birds, fiſhes, herbs, fruit-trees, and ſhrubs are found therein, and of what uſe they can be either in diet, medicine, dying, building, or any other part of œconomy; the inhabited and uninhabited parts, cities, forts, havens, mines, traffic, and manufactures; the particular commodities proper for home conſumption, or for exportation; their imports from other countries; the ſituation and diſtances of places; their curioſities, whether natural or artificial; the condition of the public roads: they ſhould likewiſe be acquainted with the cuſtoms and manners of the inhabitants, their number and language, religion, antiquity, and ſettlement; and alſo with the circumſtances of the nations bordering upon them. All which knowledge may not only be ſerviceable to the people themſelves, but likewiſe to neighbouring nations that are connected with them, either by trade or otherwiſe. The natural curioſity of man is not even ſatisfied with this: we frequently give ourſelves a great deal of trouble in ſearch of things that have no relation to us, eſpecially if we have hitherto learned nothing, or at leaſt nothing circumſtantial and certain concerning

cerning them. For these reasons I hope readers of every 000
denomination will favourably receive this description of *Kamtschatka*, designed both for use and entertainment. The author, if death had not prevented him, would himself have explained the occasion that gave him an opportunity of being informed of all these particulars; and, as such an account may be expected, I shall endeavour to do it for him in as few words as possible.

In the year 1733, her Imperial Majesty *Anne* or- 121
dered an expedition on foot to examine the coast of 122
the Northern or Frozen Ocean, likewise that to the East about *Kamtschatka*, and from thence to *America* and *Japan*; and also at the same time to make out a description of *Siberia*, and particularly of *Kamtschatka*; to observe the situation of the places, their natural history and inhabitants, and whatever else might be necessary to a full knowledge of those people. To this end three professors of the Imperial Academy of Sciences were sent along with the sea-officers. These three gentlemen divided the task amonst them; one undertook to make the astronomical and physical observations; the second to remark whatever regarded natural history; the third to draw up a description of the people and country. To 122
these members of the academy several other proper assistants were added: these were six *Russian* students, who had an opportunity to improve themselves while

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

122 they were assisting the professors, and in time be qualified to fill up their vacancies. The author, 114 *Stephen Krasheninicoff*, one of the above-mentioned six, was born in *Moscow*, and had his first education in the Latin school of the convent of our Lord, where he learned the principles of rhetoric and philosophy, and excelled most of his school-fellows, both in capacity and application to his studies. Though he was principally employed in the study of natural philosophy, yet he shewed such inclination to geography and civil history, that in the Year 1735 he was employed in these different enquiries at such places as the 122 professors themselves did not visit. In the year 1736 the members of the academy, being at *Yakutski*, were informed, that the sea-officers had made but a small progress in their discoveries, and that they would not be able to reach *Kamtschatka* in several years; the professors therefore having many useful observations to make in *Siberia*, thought proper to send before them a person, on whom they could depend, to prepare for their reception at *Kamtschatka*. To this trust Mr. *Krasheninicoff* was appointed, and at the same time was furnished with proper instructions and directions. Some accidents prevented the professors from arriving at *Kamtschatka*, excepting the professor of astronomy; the others were ordered by the senate to return to St. *Petersbourg*, and in their way to make further observations in *Siberia*. Thus all enquiries

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

quires into the ſtate of *Kamtſchatka* remained to be made entirely by Mr. *Kraſheninicoff*. The profeſſors furniſhed him with ſuch aſſiſtances as they themſelves had, by order of the ſenate. He travelled from one end of *Kamtſchatka* to the other, accompanied by a guard and proper interpreters, being allowed to examine all the writings in the different forts and offices. The profeſſors alſo, in the frequent accounts received from him, found that his obſervations in natural hiſtory and phyſics were juſt; and in any difficulties aſſiſted him with their advice by letters. 122

In the mean time, the Imperial Academy of Sciences, ſenſible of the importance of purſuing their reſearches into the regions of *Siberia*, thought proper to ſend thither, in the year 1738, one of their adjuncts, *George William Steller*, who met the profeſſors the following year in their return at *Yenefeisky*. This learned and curious gentleman had a great inclination to go to *Kamtſchatka* by water. His deſire was complied with; and the ſame inſtructions were given to him that were given to Mr. *Kraſheninicoff*. They ſent likewiſe along with him a painter, to delineate whatever might be found curious in natural hiſtory. They continued together at *Kamtſchatka* 'till the year 1740, at which time Mr. *Steller* embarked in the voyage that was made in order to diſcover the coaſt of *America*; and Mr. *Kraſheninicoff* was ſent to *Yakutski*, which as ſoon as the profeſſors were

122 were informed of, they ordered him to join them, and return with them to *Petersbourg* in the year 1743. Mr. *Steller*, in his return from *Siberia*, died of a fever the 12th of *November*, 1745, in the town of *Toumen*.

128 When Mr. *Krasheninicoff* had given the Academy of Sciences a full report of all his obſervations at *Kamtſchatka*, and had likewiſe received all Mr. *Steller*'s papers, it was thought proper to join theſe two works, and to commit their compilement to the perſon who had the greateſt ſhare in the merit of the diſcovery. This is the origin of the following deſcription of *Kamtſchatka*; a country never yet deſcribed by any author of credit, and where the manners and cuſtoms of the inhabitants are beyond meaſure ſingular and 114 uncommon. It is to be wiſhed that ſuch writers as have hitherto given us accounts of new-diſcovered countries had taken the ſame pains to inform themſelves that this writer hath. The author was advanced in the year 1745 to be an adjunct of the Academy of Sciences, and in the year 1750 was made profeſſor of botany and natural hiſtory. He died in the 42d year of his age, when the laſt ſheets of his book were printing off; and was one of thoſe few whom perſonal merit alone, and no advantages of birth or fortune, contributed to raiſe.

102 For the better underſtanding of the geographical 128 deſcriptions, it was thought proper to add two maps of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

of *Kamtſchatka* and the neighbouring countries, between which and other maps of thoſe countries, even ſuch as the academy itſelf hath formerly publiſhed, the curious reader may obſerve a great difference. But the author aſſerts that every thing is laid down from the ſtricteſt inquiry, and had purpoſed to ſupport the authenticity of his maps, by publiſhing ſuch memoirs as would prove their accuracy beyond diſpute. 102 128

A GENERAL

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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THE Russian *language in which the Original of the following sheets was written, is rude and unpolished: other nations have with great care improved and refined their languages by giving proper encouragement to men of learning and genius, but in that country literature has, on the contrary, been 'till very lately rather discouraged.*

Great indulgence should, therefore, be allowed the Author of this work: for though his manner is indigested, and his stile inelegant, abounding in digressions, and some uninteresting narrations, which obscure and confuse the more essential passages; yet he has communicated

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nicated many very useful remarks, greatly contributing to the improvement of the trade, geography, and natural history, of the country he describes.

In order to render this piece more regular and perfect, it would have been necessary to new model the whole; but the gentleman, who undertook this Translation only for his amusement, was frequently interrupted in the course of the work by the necessary duty of his profession, and prevented from revising it before it went to the press by his sudden departure for Petersbourg. *Having been many years absent from* England, *and accustomed to write and speak in several different languages, he of course adopted their idioms, and, consequently, corrupted the phraseology of his own. Thus much it is thought necessary to say in justice to the Translator: and it must be confessed he has great merit with his countrymen; as it is entirely owing to his labours, hasty and imperfect as they may seem, that we have any knowledge of this remote, unknown, and very extraordinary country, since so few, and it may be said, scarce any* Englishman *is able to read the Original.*

This

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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This work is divided into four parts. The first, which is entirely Geographical, and in the Original makes eleven chapters, is here abridged, and reduced to four, as the Author had minutely described a great number of hills and rivers which did not serve to illustrate the subject. But it is hoped that nothing is omitted which may answer that end, or which might in any way entertain the reader, or help to ascertain the situations, measures, distances, and boundaries.

The second part contains the Natural History. This part has also been greatly contracted, from the design of offering to the reader nothing but what was really useful, curious, or entertaining; and in order to make it completely instructive, many notes have been adjoined, to explain some articles, or reconcile them with the accounts of former voyagers.

The third part of this work has been most considerably abridged, as in treating of the manners, customs, and religion of this barbarous nation, it was loaded with absurd practices, idle ceremonies, and unaccountable superstitions. Sufficient examples of all these have been retained

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retained to ſhew the preciſe ſtate of an unpoliſhed, credulous, and groſly ignorant people.

The fourth contains the firſt diſcovery, conqueſt, and planting of Ruſſian *colonies in the country of* Kamtſchatka. *This part is divided into eight chapters, giving a relation of ſeveral expeditions both by ſea and land made into that country. It is alſo interſperſed with a great many uſeful remarks relative to the geography, natural hiſtory, cuſtoms, manners, and civil and military policy, of the country. It likewiſe gives a particular account of the forts built there by the* Ruſſians, *as well for the protection of their ſettlements, as to keep the natives in awe.*

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

E R R A T A.

For Fructicosa	*Page* 88,	*Annot.*	*read*	Fruticosa
Chœreoptrylum	89,			Chœrophyllum
Autoris.	141,			Autorum !
Caudacuta	159,	*Line* 29,		Caudâ acutâ
Self-murd	176,	26,		Self-murder
Dood. Append. 326, Ray Linn.	192,	*Annot.*		Doodij Raij Syn. II. Append. 329
Pentaphylladis fructicosus,	219,	*Line* 1,		Pentaphylloides fruticosa
Chamaenchododendros	219,	18,		Chamœrododendron
Anemonides	220,	15,		Anemonoides

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

A GEOGRAPHICAL DESCRIPTION OF

KAMTSCHATKA.

AND OF THE

COASTS and ISLANDS adjacent to it.

131

PART I.

CHAP. I.

Of KAMTSCHATKA.

THOUGH the country called *Kamtſchatka* was long known to the geographers of former times, yet ſo little were they acquainted with its ſituation, that they believed it to be joined to *Yeſſo*; and this opinion was looked upon in thoſe days as a very probable conjecture: but it has been ſince found that between the two countries there is a large ſea, interſperſed with many iſlands. The

/131/ *Russians* could form their maps of *Kamtschatka* only from conjecture 'till it was brought under their subjection; and then they could not immediately procure any accurate or satisfactory knowledge of the country, for want of persons properly qualified to make the necessary enquiries.

The two late expeditions have greatly contributed to complete the geography of these parts; particularly the last, in which the sea-officers delineated exactly all the eastern coast of *Kamtschatka* as far as the cape of *Tchukotskoi*, all the western to the *Penschinska* gulph, and from *Ochotskoy* to the river *Amur*: they described the islands lying between *Japan* and *Kamtschatka*, and also those which are between *Kamtschatka* and *America*. At the same time the gentlemen of the Academy undertook to determine the situation of *Kamtschatka* by astronomical observations, and to remark every thing worthy of notice in the civil and natural history of the country and places adjacent. In this chapter I shall only treat of the geography of this country.

That great peninsula, which makes the boundary of *Asia* to the north-east, and stretches itself from north to south about 7° 30′, is called *Kamtschatka*. I place the beginning of this peninsula at the rivers *Pustaia*, and *Anapbo*, lying in the latitude of 59° 30′. The first runs into the *Penschinska* sea, and the other to the eastward. At these places the isthmus is so narrow, that I am credibly informed the sea may in fair weather be seen on both sides from the hills in the middle. As the country runs broader towards the north, I reckon this place the isthmus that joins the peninsula to the main land. The government of *Kamtschatka* extends no farther than to this place; and all the country north of this boundary is called *Zenosse*, and is under the government of *Anadir*.

The southern part of this peninsula, which is called *Lopatka*, lies in 51° 3′ north latitude. The difference of longitude from *Petersbourg* is by the best observations found to be at *Ochotskoy* 112° 53′

112° 53′ eaſt longitude, and thence to *Bolſcheretſkoi* or the Great River 14° 6′ eaſt. The figure of the peninſula of *Kamtſchatka* is ſomewhat elliptical, being broader towards the middle, and growing narrower towards both ends. Its broadeſt place is between the mouth of the river *Tegbil* and the river *Kamtſchatka*. Towards the ſource they are joined by the river *Elouki*. 131

The *Elouki* runs in the ſame latitude with thoſe rivers for 415 verſts. They call the ſea which ſeparates *Kamtſchatka* from *America* the Eaſtern Ocean. On the weſtern ſide lies the *Penſchinſka* ſea, which begins near the ſouthern point of the cape of *Kamtſchatka* and the *Kurilſki* iſlands, and runs northward between the weſtern coaſt of *Kamtſchatka* and the coaſt of *Ochotſkoy* more than 1000 verſts. The northern part is called the bay of *Penſchinſka* from the river *Penſchina* which falls into it. The hills make one continued ridge from north to ſouth through the peninſula, almoſt equally dividing the country. From this ridge ſeveral others extend towards the ſea, between which are the courſes of the rivers. Theſe ridges ſometimes run a conſiderable way into the ſea, and are called Noſs, or capes. There are more of theſe upon the eaſtern than the weſtern coaſt. All the bays between the capes are called, in general, ſeas; each having its particular name, as the *Olutorſky* ſea, *Kamtſchatka* ſea, &c. We ſhall hereafter give our reaſons for calling the whole peninſula by the name of *Kamtſchatka*, though in fact it hath in none of the different languages of the inhabitants any general appellation; but every part of the country receives its name from its inhabitants, or ſomething remarkable obſerved in it: and even the *Ruſſian* Coſſacks underſtand *Kamtſchatka* to be only the country lying near the river of that name; and to the other parts of this peninſula they have given the following appellations: 133 103

Kurilſki Country is the ſouthern part, ſo named from the *Kuriles* that inhabit it.

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103 *The Coast* extends from the *Bolscheretskoi* or Great River to the *Teghil.*

Awatscha extends from the *Bolscheretskoi* to fort *Awatscha.*

Bobrovoi or *Beaver Sea* is the district round *Kamtschatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtschatka* to the *Teghil.*

Ukoi is the eastern coast from the river *Ukoi.*

Teghil is the western coast from the river *Teghil.*

133 *Kamtschatka* is plentifully furnished with rivers; however they
361 are so little that none of them are navigable by the smallest vessels,
563 except the river *Kamtschatka*, which will carry small vessels 200 versts upwards from its mouth. Into this river it is reported that some *Russians* were brought by sea, long before its subjection to *Russia.* It is at present called *Theodotoshine*, from the chief of those people thrown a-shore, whose name was *Theodot.* Next to this, the most considerable rivers are, the *Bolschaia-reka*, or Great River, *Awatscha* and *Teghil*; upon which the *Russians* have set-
133 tlements. *Kamtschatka* is likewise very well furnished with lakes, particularly about the river of that name, where they are so numerous that there is no passage over land in the summer-time. Some of them are very large: the most considerable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtschatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilskoy*, out of which runs the river *Osernoi.*

133 The river *Kamtschatka* rises in a marshy ground, and first runs
712 north-east; then inclines more to the east, and turning at once
R towards the south-west, falls into the ocean in 56° 30′ north
177 latitude. From its source to its mouth, in a strait line, is 496
.71 versts; but the length of its course, according to the exactest computation, is about 525 versts; during which it receives into it many brooks and rivers. About two versts from its mouth, upon the right side, are three deep bays. There are several forts built along the banks of this river by the *Russian* Cossacks, to

awe

awe and keep in ſubjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtſchatka* on the left ſide, and its head meets that of the *Tegbil.*

The *Tegbil* runs almoſt in the ſame latitude with the *Kamtſchatka*; and the ſtrait road from the one to the other is by the river *Elouki*. Some little ſorts and ſettlements of the natives are ſcattered here and there upon its banks.

The *Bolſchaia-reka*, or Great River, called by the natives *Keekſka*, runs out of a lake 185 verſts to the eaſt from its mouth, and falls into the *Penſchinſka* ſea in the latitude of 52° 45′. Its mouth is reckoned to be 555 verſts to the ſouth diſtant from that of the *Tegbil.* It is called Great upon this account, that of all the rivers that fall into the *Penſchinſka* ſea this is the only one which they can navigate from its mouth nearly to its ſpring, and this not without ſome difficulty, on account of its rapidity and the great number of iſlands. At the time of high water it is ſo deep at the mouth that large veſſels may enter; for the water has been obſerved to riſe at full and new moon very little leſs than nine *Paris* feet or four *Ruſſian* yards. It receives a multitude of rivulets; the moſt conſiderable of which is the *Biſtroy* or Rapid River, ſo called from the ſwiftneſs of its ſtream, cauſed by the many ſhoals and cataracts. You may go from the mouth of the Great River to that of the *Biſtroy*, and up within 40 verſts of its head; and from thence over a carrying place to the river *Kamtſchatka*, that ſprings out of the ſame marſh, and runs quite to the Eaſtern Ocean. And though this paſſage muſt be laborious and tedious, upon account of the rapidity of the river, and the many ſhoals and cataracts, where every thing muſt be carried by land, and which would render it impoſſible to advance more than 10 verſts in a day (as I found in my way to *Kamtſchatka* in the year 1739, when the boats were carried over the marſh, about two verſts from the head of the Rapid, to *Kamtſchatka*); yet, conſidering

489 considering that all ſorts of carriages in the ſummer are worked from one ſettlement to another by men, the ſaid paſſage by water would be a great help to the people of this country who are obliged to carry ſtores and baggage for the government: for, inſtead of employing 10 or 15 men about a carriage of 20 pood, the ſame would be performed with leſs trouble in a ſmall boat by two; and to encreaſe the facility of commerce, there would at all times be a free road, which is the caſe now only in winter.

It may be hoped, however, that even without ſuch a road this difficulty will be removed, when the new colony ſettled there ſhall have a ſufficient number of horſes for drawing thoſe carriages. From the *Bolſcheretſkoi* to the upper fort you may travel in carts drawn by horſes; but, in ſummer, this is practicable in no other part of the country by reaſon of frequent obſtructions from rivers, marſhes, lakes, and high mountains.

133 The *Baranew* rivulet is particularly remarkable for the number of boiling ſprings which are found near it. It falls into the *Keekſha*, on the ſouth-eaſt ſide, 44 verſts from *Bolſcheretſkoi*; and upon the mouth of it ſtands the ſettlement *Kalickin*, or *Opachin*, which is about 70 verſts diſtant from the boiling ſprings.

The river *Awatſcha* riſes from under a mountain about 150 verſts from its mouth, and runs from weſt to eaſt 'till it falls into the bay of St. *Peter* and St. *Paul* in the Eaſtern Ocean, almoſt in the ſame latitude with the *Keekſha*. This river is very near as large as the laſt, and of more utility.

The bay of St. *Peter* and St. *Paul*, or *Awachinſkaya* bay, is 14 verſts in length, and as many in breadth, of a circular form, and ſurrounded on all ſides by high rocky mountains. Its mouth, conſidering the ſpace of the bay, is very narrow, and ſo deep that ſhips of all dimenſions may enter it without any danger. Upon its banks are built, by order of the navy, officers' apartments, barracks, magazines, *&c.* On the north ſide of the

Awachinſkaya

Awachinskaya bay, almost opposite the *Kareemchin* fort, are two 133
high mountains, one of which smokes almost continually, and sometimes burns.

The breadth of the cape of *Kamtschatka*, between the mouth of the *Keeksha* and the *Awachinskaya* bay, measures from sea to sea, by a strait line, only 255 versts; a distance much less than that between the *Tegbil* and the *Kamtschatka*.

There are a multitude of rivulets which fall into the Eastern Ocean between the mouth of the *Awatscha* northward, and the river *Kamtschatka*, and from that again to the *Anadir*; but being of small note, we shall only remark any thing that may be curious relating to them; among which may be reckoned the mountain *Shupanoveskaya*, so called from *Shupanova* a stream near which it stands. This mountain is a volcano, and has smoked at the top in several places for many years, and sometimes rumbles, but does not flame. The *Camel's Throat*, a rivulet near this hill, is re- 133
markable for the danger of its passage through a very narrow 828
valley, between high and steep mountains, from whence the snow 784
is apt to tumble upon the slightest accident, even, it is said, from a strong exertion of the voice; and, falling down in vast heaps, sometimes buries passengers under it; for which reason the natives make it criminal to speak aloud as they pass through the valley: in other respects the road is very convenient. On the south side 133
of the river *Shopbead*, or *Shupanova*, near the sea shore, are a great many pillars or rocks, which appear above water, and make its entrance very dangerous; a little beyond this to the south is a bay, called *Nutrenoi*, surrounded by rocky mountains, about four versts in length and breadth; and near it, about the head of a rivulet, called *Shenmeek*, are large wells of boiling water. Out of a mountain near these springs, in many places, proceeds a steam, and the bubbling of boiling water is heard, but no springs have made their way through yet, though there are considerable fissures here and there, and the steam issues forth with the same rapidity

as

133 es out of the *Eclipile*, and is ſo hot that the hand cannot bear it. After paſſing through a very woody and mountainous country, we come to the remarkable ſtream *Krodakighe*, or the Larch-Tree River, which ruſhes out of the great lake *Kronotzkoy*, in ſuch a caſcade that one may walk under it: this lake is in length about 50 verſts, reckoned to be 40 in breadth, and is near 50 from the ſea. Around it are high mountains, two of which about the ſides of the upper mouth of the rivulet *Krodakighe*, riſe above the reſt. Multitudes of rivulets empty themſelves into the lake *Kronotzkoy*, whoſe ſprings are near thoſe rivers which run into the *Kamtſchatka*.

101 From this place, nothing worth remarking occurs 'till we
133 come to the *Kronotzkoy* Noſs; and here begins the Beaver Sea, which extends to the *Shupinſkoy*. The coaſt from the *Kamtſchatka* to the *Kronotzkoy* Noſs is every where ſandy; and near the bay, called *Ukinſkaya*, begin the habitations of the ſettled *Koreki*; but the *Kamtſchadales* inhabit all the country to this place.[1]

103 The river *Nungeen*, which falls into *Nutrenoi* bay, is called, by the Coſſacks, *Pankara*, becauſe there was formerly on the ſouth ſide of the bay a ſmall *Koreki* fort of the ſame name; but the inhabitants having built a ſmall fort on a high hill on the northern ſide of the bay, which they called *Gengota*, abandoned it: this fort is ſurrounded with a wall of earth about
000 a fathom high, and a yard thick, having within it a double palliſade, and on each ſide are two baſtions raiſed. It has three gates to the eaſt, weſt, and north. The *Koreki* purpoſe to leave their old fort, and to remove into the new one, which they have built about the inward point of the above-mentioned bay, and call it *Ueackang-Atenum*: this was the firſt place that I found fortified by the natives; for the others were nothing more than habitations dug in the earth, ſurrounded with huts, as with ſo many towers without any outward fortifications;

1. [all the country south of Ukinskaya Bay]

fications; but, on the contrary, further to the north, there is 000
not one ſettlement of theſe people which has not, beſides its natural ſtrength of ſituation, a wall to cover it. The *Koreki* in thoſe places ſay, that they thus provide for their defence againſt the incurſion of the *Tchukotskoi*: but as that people have never invaded theſe places, ſome other cauſe muſt be ſought for this precaution of the *Koreki*; and we can account for it only from their apprehenſions of the Coſſacks, who uſually travel this way.

Upon the north point of a bay which receives the *Kitkitannu*, 133
a rivulet, there is a ſmall fort built on a high rock, and fortified by a wall of earth about 10 feet in height. Its gates are on the eaſt and ſouth ſides. The inhabitants of it are under the commander of the ſmall fort *Keemgu*, whom the Coſſacks call a *Ruſſian*, he being of that extraction. From this fort there is a low cape that projects into the ſea; beyond this cape there is a deep bay of about eight verſts in breadth, and equally as broad at its mouth as in the middle; but all the reſt of the bays which I have ſeen are narrow at their mouths. Into this bay the river *Karaga* enters by two mouths, and almoſt meets near its head with the *Leſnaya* river, to which they uſually go from the *Karaga*. On the north ſhore of the bay there ſtands, on a high hill, the ſmall fort *Kectalgeen*, in which every hut is inclosed with a paliſade. Beſides this ſmall fort on the river *Karaga*, there are two other ſettlements of the *Koreki*. Overagainſt the mouth of the *Karaga*, 20 verſts from the ſhore, is an iſland, called *Karaginſkoy*, the lower end of which is oppoſite to *Nungeen*, and the upper end to *Kute* cape. *Koreki* in- 101
habit this iſland; but thoſe on the continent do not allow them to be of the ſame race with themſelves; and it muſt be obſerved, that the manners of the *Karaginſkoy* appear as barbarous to the *Koreki*, as thoſe of the *Koreki* do to more

civilized nations.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 civilized nations. Their number is reckoned to be 100 men or more, but not above 30 of them pay any tax, the reſt, at the time of its gathering, hiding themſelves in the mountains. They go to this iſland in the ſummer in their little boats; but in the winter they have no communication with it.

133 There is little worth notice after you paſs the above-mentioned
721 iſland, 'till you come to the *Uyulen* or *Olutora* river. Upon this
R river the *Ruſſians* twice built the *Olutorſkoy* fort. The firſt was
177 built by a native of *Jakutſki*, called *Athanaſey Petrove*, upon
.71 the ſouthern ſhore, very little above the mouth of the *Kalkina* rivulet which falls into the *Olutora* from the ſouth; and the ſecond a great deal below that place under the direction of Major *Paulutſkoy*, who was ſent there on account of the rebellious *Tchukotſkoi*; but both of them were forſaken and burnt down by the *Olutores*. The laſt fort is about two days' voyage from the mouth of the *Olutora*.

133 The *Atwaleck* cape, which extends 80 verſts into the ſea, begins near the river *Elir*, and points towards the *Govyannoy* cape. The ſea between thoſe capes is called *Olutorſkoy*. The *Pockatska* riſes in the ſame plain with the river *Glotova*, which runs from the north-eaſt into the *Olutora*. From the *Kalkina*, where was built the firſt *Olutorſkoy* fort, to the river *Pockatska*, is five days' journey with rein-deer, reckoning for each day between 30 and 40 verſts. Between the *Katurka* and the land oppoſite to *Anadir*, there projects into the ſea a rocky cape, called *Kateerſkoy* in 64° 15′ north latitude. The diſtance from the *Petropaulauskaya* haven to the mouth of the *Anadir*, as obſerved by the ſea-officers, is 19° 20′; and the ſea coaſt from the *Kurilskaya Lopatka* to the *Tchukotskoi* cape, north eaſt, which lies in 67°, is for the moſt part mountainous, eſpecially in thoſe places where the capes project into the ſea.

We

We now come to confider the rivers that fall into the Eaft /133
Sea from the mouth of the *Awatfcha*, towards the fouth, to the *Kurilskaya Lopatka*; and from the *Kurilskaya Lopatka* into the *Penfchinska* fea to the *Tegbil* and the *Puftaia* rivers.

There are but few rivulets that interfect the country between the mouth of the *Awatfcha* and the *Lopatka*. The ridge of mountains, which divides *Kamtfchatka*, extends to the Eaft Sea: the declivity is fteep and craggy; and the gulphs and bays, which are formed by thefe mountains, afford a fafe harbour for veffels of any burthen in the worft weather.

The *Kurilfkaya Lopatka*, which by the natives is called *Ka-* /103
poore, is the fouthernmoft point of the cape of *Kamtfchatka*, and /133
divides the eaftern from the *Penfchinska* fea: it takes its name from its refemblance to a man's fhoulder-blade. Mr. *Steller*, who has been upon the *Lopatka*, fays, that the place is not more than 10 fathoms above the furface of the fea, and for that reafon is fubject to great inundations, fo that for 20 verfts from thence no-body lives, except thofe who come there in the winter to catch foxes; and when the ice is carried thither with the beavers on it, then the *Kuriles*, who follow this ice along the fhore, affemble here in great multitudes. Within three /134
verfts from the *Lopatka* nothing grows except mofs; and there /137
are neither rivers nor fprings, only a few lakes and pools. The foil confifts of two layers, the lower is ftrong, and the upper fpongy; and its furface is full of hillocks, and ufelefs. The firft rivulet /133
falling into the *Penfchinfka* fea, is called the *Utatumpit*; two verfts from the *Utatumpit*, the rivulet *Tapgutpan* runs into the fea, upon which ftands a fmall fort called *Kochinskoy*; and three verfts from thence is the *Pitpuy*, or *Ozernaya*, which runs out of a confiderable lake divided from the fea by a mountain. The *Ruffians* call this river *Kambala*, or Flounder River, becaufe great numbers of flounders are caught in the mouth of it.

 The

/33 The lake out of which it runs, and the mountains which lie between it and the ſea, are called by the ſame name. Near the *Kambalinſkoy* lake is built *Kamabalinſkoy*, a ſmall *Kurilſkoy* fort. From the *Kurilſkoy* lake, towards the ocean, ſtrait to the *Awatſcha*, is not above 19 *German* miles; but the road is exceſſively difficult; for you muſt paſs over eleven high mountains, and ſome of them are ſo ſteep that travellers are obliged to let themſelves down with ropes.

About this lake are ſeveral remarkable mountains; particularly two, one on each ſide of it, which emit ſmoke, and have done ſo many years; and which Mr. *Steller* ſays he ſaw in his journey from the *Yavina* to the *Ozernaya* river.

Though I went as far as the river *Ozernaya* in 1738, yet I did not ſee thoſe mountains, and only obſerved hot ſprings in two different places. Theſe ſprings run within 20 verſts from its mouth, ſome of them into the river *Pauſtia*, and others into the river *Ozernaya*, both of them on the ſouth ſide of it.

The river *Apanach* is reckoned the boundary of the province of *Kurilſkoy*. It runs from under the mountain called *Opalſkaya Sopka*, which is 85 verſts from the ſea, and excels all the reſt of the mountains about the *Penſchinſka* ſea both in height and fame; particularly on this account, that it can be ſeen by ſeamen from both ſeas, and ſerves them for a land-mark.

The ſhore from the *Lopatka* almoſt to the *Kambalina* is low. From the *Kambalina* to the *Ozernaya* is ſo mountainous and ſteep, that one cannot go near the ſea.

From the *Ozernaya* to the *Opala* it is likewiſe mountainous, but more upon a level.

From the *Opala* to the Great River is an extenſive plain, ſo that not one hill is to be obſerved near the ſea. After paſſing a great number of rivulets, all of which ariſe out of a range of mountains, called

called *Stanovoy* ridge, we come to the river *Geek*, called by the /103
Coſſacks *Vorovſkaya*, or Rogue's River, becauſe the *Kamtſchadales* /133
who live upon it were frequently concerned in inſurrections, and uſed to kill the tax-gatherers treacherouſly. From hence we meet nothing worth notice 'till we come to a *Kamtſchatkoi* fort, called *Tackauta*, in which travellers uſually equip themſelves for paſſing the ridge. Here the common road lies near a rivulet, from the head of which it paſſes the *Stanovoy* ridge, 'till it deſcends to the heads of the river *Keergena*, which falls into the *Kamtſchatka*.

From the *Keergena* we paſs up the river *Kamtſchatka* to the /133
Kamtſchatkoi fort. The country between the little fort *Tackauta* and the *Stanovoy* ridge is a deſert of 110 verſts in extent, and from the ridge to the upper *Kamtſchatkoi* fort is 65, the land equally barren.

The above road is very difficult and dangerous, for a great part /133
of it lies on the river, which, from the rapidity of its current, in 487
many places never freezes. Travellers are obliged, therefore, in ſome parts to keep cloſe to the ſides with great care; for if the ice breaks nothing can ſave them, the rocks on the banks in ſeveral places being ſo ſteep that it is impoſſible to get on ſhore, and the river runs ſo ſwiftly that you are immediately driven under the ice. The ridge is paſſable only in calm and fair weather, for which we are obliged to wait ſometimes ten days or more; at other times it is impoſſible to find the way, and we muſt inevitably fall down the precipices, and be loſt. The properest time to paſs is when no clouds are to be ſeen on the top of the ridge, for even the leaſt cloud is a ſign of a great ſtorm there. To croſs over this ridge takes up a whole winter's day. The greateſt danger is in paſſing over the very top, which is called by the Coſſacks, *Greben*, or a comb. Its breadth is 30 fathoms; it is like a boat with the bottom upwards, the aſcent on both ſides being very

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 very ſteep. The paſſage is troubleſome even in the calmeſt weather,
487 for the road falling off leaves nothing but ice: the *Kamtſchadales*,
481 therefore, in order to paſs it in ſafety, have under their ſnow-ſhoes, two nails; yet theſe are of ſmall ſervice if the wind overtakes them there, for they are frequently carried from one ſide to the other to the great hazard of their lives, or at leaſt of their limbs. Beſides which, this paſſage is attended with the danger of being ſmothered in the ſnow, the narrow path lying between high, and almoſt perpendicular, mountains, from which the ſnow falls in heaps upon the leaſt motion. This is a danger, indeed, unavoidable in every place where the road lies in narrow and deep vallies.

In mounting the ridge all muſt walk, for the dogs can hardly aſcend it even with the light baggage; but in deſcending it is otherwiſe, for then they only leave a ſingle dog in the ſledge: the reſt are taken out, it being impoſſible to manage them all in ſuch a road. Although this paſſage of the ridge be ſo difficult, yet, as it is the uſual road to *Kamtſchatka*, one may conclude that any other paſſage from ſea to ſea muſt be ſtill more difficult and dangerous.

133 The coaſt from the mouth of the Great River to the river *Puſtaia*, as far as the *Shaback*, is ooze and ſoft mud, ſo that many veſſels have been thrown upon it without receiving any hurt. From the *Shaback* the ſhore begins to be bolder, though not rocky; but from the *Tulaban* river it is mountainous, rocky, and dangerous to ſeamen.

600 The late deſcriptions of the ſhore of the *Penſchinska* ſea, from the *Leſnaya* to the *Penſchina* and to the *Ochotska*, are more particular than the former: for in the year 1741 a high road was eſtabliſhed to *Kamtſchatka* with poſt-houſes at proper ſtations; yet, with regard to the diſtances of places, they are not much more accurate; ſince there were no aſtronomical obſer-

vations

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

vations made, nor the diſtances meaſured: nor are there any hopes of its being ſoon done, as travelling in thoſe parts is very dangerous; the wild *Koreki* oppoſing the *Ruſſian* government, and frequently committing murders upon ſmall parties that paſs that way; and though ſometimes they appear friendly, yet travellers are always obliged to be ſo much upon their guard againſt the deceit and cruelty of ſuch a barbarous race, that they have no time to make accurate ſurveys. Beyond the *Puſtaia* is the river *Talouka*; 50 verſts from which is the river *Penſchina*, remarkable for giving name to the *Penſchinſka* ſea. Thirty verſts from the ſea is built a ſmall fort, called *Acklanſkoy*, from the river *Acklan*, which falls from the right ſide into the river *Penſchina*. Here ſome *Ruſſian* Coſſacks live for the diſpatch of the poſt, and to bring into ſubjection the *Koreki* that refuſe to pay taxes. The firſt houſe was built there in the year 1679, ſince which certain ſoldiers were ſent there to gather the taxes; but afterwards, on account of the great diſtance and danger of the place, it was abandoned. This ſpot has been made remarkable by the murder of two commiſſaries, with a party of Coſſacks, many years ago, who conveyed the tribute from *Kamtſchatka* to the *Anadirſk* fort.

From the river *Talouka* to the mouth of the *Penſchina* the ſea coaſt lies north-eaſt; thence it turns ſouth-weſt as far as the rivulet *Gogulan*; after which the coaſt turns to the eaſt, 'till we approach the river *Ochotſka*: the interval between which laſt and the *Penſchina* is watered with ſeveral rivulets that run into the *Penſchinſka* ſea, for whoſe names we refer to the map. The *Cuchtai* river falls into the *Ochotſka* very near the ſea: between them is a conſiderable bay, in which veſſels may anchor. The river *Cuchtai* is particularly remarkable for its port, and for the great quantities of Larch trees, and other ſorts of wood fit for building veſſels for navigation, which grow on its banks, and which are not found in ſo great plenty along the river *Ochotſka*. The river

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The Harbour of St. Peter and St. Paul.

The Harbour of Ochotsky.

facing p. 24

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 river *Ochotſka* has three mouths; the New mouth, the Old mouth, and the *Bulginſkaya* out-let.

The New mouth is dry, except at the time of a great inundation; and even then veſſels cannot enter it. The preſent *Ochotſkoy* fort is built between the New and Old mouths, almoſt upon the beach; and the former, which is now called the old 631 fort, was ſix verſts from the ſea. This place is called *Ochotſkoy* 651 poſt, and commonly *Lama*; and has under its juriſdiction all R *Kamtſchatka*, and the coaſt of the *Penſchinſka* ſea to the frontiers 177 of *China*. For which reaſon the tax-gatherers are all ſent out 65 from hence; and the tax, when gathered, is immediately brought from all other places hither, where it is firſt appraiſed, and then ſent into *Jakutzk*. Formerly the *Ochotskoy* fort was poorly inhabited, and under the juriſdiction of *Jakutski*, but it is much increaſed ſince the *Ruſſians* have made this the port for their paſſage by ſea to *Kamtſchatka*.

000 This place is better built than any of the other forts, the houſes being good and regular, particularly thoſe belonging to the government, in which the officers of the *Kamtſchatka* expeditions reſided. In my time there was neither a church nor a fortification, but they were building both. Though the country be as barren as *Kamtſchatka*, yet its inhabitants are better furniſhed with every thing, becauſe goods and proviſions brought from *Jakutski* are ſold here cheaper by one half. Though plenty of corn is brought here, yet no freſh meat is to be got, except wild fowl and veniſon, and that ſeldom. Fiſh in this place is almoſt as plenty as in *Kamtſchatka*, except the *Chaveecha*, which they bring hither from thence. The greateſt want in this place is that of good paſturage near them; therefore the inhabitants cannot breed cattle. They have tried many times to keep them upon the river *Avi*, but with great loſs, moſt of them dying for want of ſuſtenance. Time will ſhew whether the *Jakutski* people, that are ſettled along the rivulets which fall into the *Ochotska*,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 *Ochotska*, be more ſucceſsful. The want of cattle, in ſome meaſure, is made up by the deer, which the natives have in greater plenty than in *Kamtſchatka*; but theſe are more uſed for carriage than food. They alſo travel with dogs, but not ſo commonly as in *Kamtſchatka*.

There were four tranſport-veſſels built here: namely; the Fortune, in which in the year 1737 I went to the Great River, and which was loſt ſoon after; the boat Hauriel, which was uſed alſo in long ſea voyages for ſome time; the Galliot *Ochotska*; and a ſmall veſſel, which was not then launched. The paſſage by ſea uſed formerly to be only once a year; namely, in the autumn, when the tax-gathers went from *Ochotſky* to *Kamtſchatka*, and brought back the tax the next year: but now they go oftener.

651 R 177 65

000 The paſſage from the *Ochotska* to the Great River is directly ſouth-eaſt. Between the fort *Ochotskoy* and the river *Amur*, whoſe heads are in the *Ruſſian* dominions, the following rivers run into the ſea: the firſt is *Urack*, 24 verſts from the *Ochotska*. It is to be obſerved, that in the time of the *Kamtſchatka* expeditions the proviſions were uſed to be ſent down this river upon flat-bottomed boats to the *Ochotska*; for which reaſon they built a dock 50 verſts from its mouth, where the ſailors and the *Ochotſkoy* Coſſacks uſed to build veſſels for the above expeditions, and ſend the ſaid proviſions from the *Iudomſkoy* Kreſt, or croſs, to that place over land by horſes or deer in ſledges. But this way of carriage by water was attended with great trouble, loſs of time and people; for the river is very rapid, rocky, and full of cataracts, and not always deep enough, except in the ſpring, or after great rains: and as theſe additional waters run ſoon off, they are obliged to watch every opportunity of ſending down the loaded veſſels; which if they omit, they muſt often wait a long time.

There never was a fleet ſo happy in this navigation as not to loſe ſome veſſels either by rocks or cataracts, many of which are ſo

dangerous, that a *Siberian* ſoldier, who ventured to be a pilot there, was made a ſerjeant for it. One may judge of its great rapidity by this, that captain *Walton* went down the river from the *Urackſkoi* dock to the mouth in 17 hours, notwithſtanding the many ſtops he met with in paſſing the cataracts, and relieving the other veſſels which had ſtruck on the ſhoals.

Thirty verſts from the *Urackſkoi* dock, up the river *Urack*, is built a ſmall cuſtom-houſe; at which all paſſengers are ſearched for brandy, china, tobacco, and other contraband or ſmuggled goods.

The river *Urack* falls into a bay called by its name, which extends along the ſhore two verſts: its breadth is 200 fathoms. From hence, 'till we come to the *Ude*, nothing of moment occurs; on the nothern bank of this river ſtands the fort *Udeſkoy*, about ſeven days' voyage by water from its mouth, and we may reckon 10 or 12 verſts for each day's journey, as is generally allowed. The buildings in it are a church of St. *Nicholas*, the tax-office, and 10 houſes of the inhabitants. This fort is under the juriſdiction of *Jakutſki*, from whence the tax-gatherers are ſent.

The *Tunguſi*, who pay their taxes in here, are reckoned ſix nations; and their taxes amount every year to 85 ſables and 12 foxes' ſkins. Formerly only people that were in the ſervice of the government lived in this fort; but in the year 1735 a colony of 10 families of boors were ſettled there to eſtabliſh agriculture. But it is ſaid there are no hopes that corn will grow in theſe places, the ſoil being quite improper for cultivation.

Near the *Mamkinſkay* Noſs, and oppoſite to a large bay which abounds with whales and ſeals, lies *Medveſhuy*, or the Bear's iſland: it is about 10 verſts in length, and ſix in breadth, at about a day's ſail on the eaſt. South of the Noſs lies the iſland *Theocliſtove*, which uſed formerly to be reſorted to in winter by the hunters. This iſland abounds with rocks and woods, in which are ſables and foxes.

The

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The *Shantanskoy* island is larger than *Theoclistove*. *Shantura* is three day's journey by land from north to south; and the boats are three days and a half in coasting it.

The former of these islands abounds not only in wood, but also in different sorts of animals; particularly foxes, sables, ermines, and bears. The principal birds are swans, ducks, and geese. Several sorts of fish are found in the bay; and different kinds of berries in the fields. Half a day's sailing south from the *Shantanskoy* is an island, in length and breadth about 12 versts, called *Hoodee Shantar* (that is, unprofitable); so named, because there grows no sort of wood upon it, though it has not been long in this state, for formerly there was wood enough, and many sables were caught there; but being burnt through the negligence of the *Gilijacks*, who left their fires unextinguished, it is now nothing but a bare mountain, and all the animals have left it. South from the *Hoodee Shantar*, in half a day's time, they go in boats to the *Belochay* island, which is equal in size to the former. This island abounds in woods, stocked with many animals, especially squirrels, from whence it took its name.

The rest of the coast has nothing worth remarking, 'till we come to the river *Amur*, or, as it is called, *Sagalin Ula*, being the last great river which comes within our notice.

This river rises in the *Russian* territories, and, according to the *Chinese* maps, falls into the sea, at the point of a large bay, in 52° 50′ north latitude. This bay lies between the *Dulangada* Noss and the *Vasipunu* Noss. From the *Vasipunu* Noss is the nearest passage to a great and inhabited island, which extends from the north-east to the south west 4° 30′: the channel is 30 versts over. The coast from the river *Ude* to the *Amur*, excepting the capes and promontories, lies almost directly north and south.

000 Having described all the coast and principal rivers on the continent, we shall now proceed to describe the principal roads through this country.

CHAP. II.

Of the ROADS *in* KAMTSCHATKA.

487 491 FROM the *Bolscheretskoi* to the upper *Kamtschatkoi* fort are three principal roads: the first, along the *Penschinsky* sea; the second, by the Eastern Sea; and the third, by the *Bistroy*.

By the first they go up the river *Oblukomina* to the ridge *Oblukominskoy*, and over the ridge to the river *Keerganick*, along which almost to the river *Kamtschatka*, and from thence up the river to the upper *Kamtschatkoi* fort.

By the second they go from the *Bolscheretskoi* up the Great River to the *Nachikin* fort, and cross a small ridge to the river *Awatscha*, to the haven of *Petropaulauskay*, or of *Peter* and *Paul*; and from thence along the coast of the Eastern Sea north to the river *Shupanova*, and up that river to its head; from whence over the ridge to the river *Poweecha*, and down the mouth of that river, which is over-against the upper fort.

The third road lies from the *Bolscheretskoi* up the Great River to the *Opachin* fort; from thence through plains to the Rapid River, up to its head; and thence, down the river *Kamtschatka*, to the upper *Kamtschatkoi* fort.

They travel the two first roads chiefly in winter; the third, on foot in summer. The first and the last roads are measured, but the second is only measured half way; and the particular distances are here adjoined.

First

First road from the *Bolscheretskoi* fort, by the *Penschinsky* sea. 491

	versts	fathoms
From the *Bolscheretskoi* office to the *Zaeemka*, or the estate of Mr. *Trapeznicoff*, — —	2	100
From thence to the river *Utka*, —	21	200
From thence to the *Kiechchiek*, to the *Akaheesherro*, — —	42	250
From thence to the *Nemtick* —	25	0
From thence to the *Kole* — —	22	0
From thence to the *Vorovskaya* —	51	0
From thence to the *Brewmka* — —	24	0
From thence to the *Kompucovoy* —	13	0
From thence to the *Krostoborova* —	36	0
From thence to the *Oblukomina*, to the settlement of *Tarein*, — — —	24	0
From thence to the *Oblukominskoy* ridge	110	0
From thence to the upper *Kamtschatkoi* fort	65	0
	486	50

Second road from the *Bolscheretskoi* fort, by the Eastern Sea.

From the *Bolscheretskoi* fort to the small fort *Opachin* — — —	44	0
From thence to *Nachikin* — —	74	0
From thence to the *Awatscha* and the *Paratunka* — — —	68	0
From the *Paratunka* to the *Petropaulauskaya* haven — — — —	16.	0
From thence to the rivulet *Calabturka* —	6	0
From thence to the fort *Nalacheva* —	34	0
In all from *Bolscheretskoi* to the small fort *Nalacheva* — — —	242	0

From

491 From the river *Nalacheva* they in ſix days arrive at the upper fort.

Third road from the *Bolſcheretskoi* fort, by the Rapid River.

	verſts	fathoms
From the *Bolſcheretskoi* fort, up along the Great River, to the *Opachin* ſmall fort ——	44	0
From thence to the upper ford ——	33	0
From thence to the ſettlement of *Abanichevo*	22	0
From thence to the ſettlement of *Ganaline*	33	0
From thence to the head of the *Kamtſchatka*	41	0
From thence to the upper *Kamtſchatkoi* fort	69	0
In all from the *Bolſcheretskoi* to the upper *Kamtſchatkoi* fort —— ——	242	0

485 In all the places expreſſed in the tables the travellers take up lodgings at night, except where the diſtance is only five or ſix verſts. Notwithſtanding the great diſtance between the *Obluko-minſkoy* and the upper *Kamtſchatkoi* fort, in good weather they travel it in three days, lying two nights in deſert places.

487 There are other roads from the *Bolſcheretskoi* to the upper fort,
491 both from the *Penſchinſka* ſea and from the Eaſtern; for every river there that falls into either of thoſe ſeas has a paſſage to *Kamtſchatka:* but, as nobody except the *Kamtſchadales*, and ſometimes the Coſſacks, in great neceſſity, travel them, it was not thought material to deſcribe them; nor can one well aſcertain the diſtances by their journeys.

They go from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort, either through the upper *Kamtſchatkoi* fort, or by the coaſt of the Eaſtern Sea. From the upper *Kamtſchatkoi* fort the way is along the river *Kamtſchatka*, except where the river makes great windings.

windings. The diſtance from the upper to the lower *Kamtſchatkoi* fort is laid down in the following table. 491

	verſts	fathoms
From the upper *Kamtſchatkoi* fort to the river *Keergena* —	24	0
From thence to the ſmall fort *Maſhurin*	32	0
From thence to the ſmall fort *Nachikin* —	87	0
From thence to *Golka* —	33	0
From thence to the ſmall fort *Talecheva*	26	0
From thence to the *Uſhky* —	16	0
From thence to the *Krewky* —	25	0
From thence to the *Kreſtee* —	25	0
From thence to the *Gorboon* —	26	250
From thence to the *Harchin* —	11	0
From thence to the *Camenoy* ſmall fort	27	0
From thence to the *Cavanackey* —	16	0
From thence to the *Kamack* —	6	0
From thence to the *Hapick* —	8	250
From thence to the *Schockey* —	9	0
From thence to the *Obooboffs* ſettlement	17	250
From thence to the lower *Kamtſchatkoi* fort, to the church of St. *Nicholas*, —	7	250
In all from the upper to the lower fort —	397	0
And from the *Bolſcheretskoi* —	833	50
	1230	50

The other road from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort being meaſured only to the *Nalacheva* fort, it cannot exactly be known which is the neareſt way; but one may imagine that there is not much difference between them. 485 491

The

485 The chief places on that road where they usually lodge at night are the small forts of *Opachin*, *Nachiekiek*, and the *Tarein*; the haven of *Peter* and *Paul*, which was formerly called the small fort *Austin*; the *Ostrovenaya* river, *Supanova*, and the *Chazma*; upon all which rivers there are *Kamtschatkoi* habitations.

487 From the *Chazma* to the river *Kamtschatka* the road lies over
491 desolate mountains; and they come upon the river just by the village *Oboobosts*, seven versts and a half above the lower *Kamtschatkoi* fort, lodging but one night in a desert place.

From the lower *Kamtschatkoi* fort to the northern parts two roads are made, the one is by the *Elouki*, to its head; and from thence over a ridge to the head of the river *Tegbil*, along which they go quite to the sea; and from thence, not far off from the sea, to the rivers *Lesnaya* and *Podkargirnaya*.

In a moderate way of travelling, when there is no hindrance from bad weather, they go from the lower *Kamtschatkoi* fort to the lower *Tegbilskoy* small fort, called *Shipin*, in 10 days.

By the second road they may travel in the same manner to the river *Karaga* in ten days, whose head is near the river *Lesnaya*.

From the upper *Kamtschatkoi* fort to the *Tegbil* the common road is by the river *Elouki*: first, over the ridge to *Oblukominskoy* fort, and from thence north by the *Penschinsky* sea; and another road is by the river *Krestovaya* to the *Harbooseva*.

By the first road they may reach *Tegbil* in 10 days; but they very often lodge the tenth night on the road, not so much on account of the distance as the badness of the roads, and the very mountainous places over the *Utkolotskoy* cape. The second road requires 11 or 12 days.

The passage along the *Elouki* to the *Tegbil* is the longest of all, for that requires above 14 days' journey.

From the *Bolscheretskoi* fort southward to the *Kurilskaya Lopatka* the usual passage is nine days. The distance from the

Bolscheretskoi

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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491 *Bolscheretskoi* fort to the *Kurilskaya Lopatka* is 210 verſts 300
487 fathoms, which ſpace may be eaſily travelled, even in four days; but the Coſſacks of thoſe places have a cuſtom of ſtopping at any ſmall fort, under pretence of ſome buſineſs there, though their moſt probable motive is to refreſh their dogs. At a middling rate I have travelled in three days from the *Kamtſchatkoi* to the *Bolscheretskoi*, which is near 150 verſts.

	verſts	fathoms
From the *Bolscheretskoi* fort to the mouth of the Great River — — —	33	0
From the mouth, along the ſea-ſhore, to the river *Opala* — —	85	0
From thence to the *Koſhubochiek* —	18	0
From thence to the *Yavina* —	15	0
From thence to the river *Ozernaya* —	15	0
From thence to the *Kambalina* —	36	300
From thence to the *Lopatka* —	27	0
In all from the *Bolscheretskoi* to the *Kurilskaya Lopatka* — —	210	300

CHAP. III.

Of the KURILSKI ISLANDS.

10 UNDER the name of *Kurilski* iſlands are underſtood all
131 thoſe iſlands which extend from the *Kurilskaya Lopatka*, or the ſouthern end of *Kamtſchatka*, in a row ſouth-weſt quite to *Japan*. They derive their names from the inhabitants of thoſe iſlands which lie neareſt to *Kamtſchatka*, who are called by the

103 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact
131 number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*,
136 and extends in length from the north-eaſt to the ſouth-weſt
161 50 verſts, and in breadth about 30. This iſland is full of
651 mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh-

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

101 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and vo-
651 luntarily pay a tribute in beavers and foxes. The author concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

kind representations, of the clemency of her Imperial majesty, 651
with promises that she would protect and defend them from their enemies.

Neither I nor Mr. *Steller* could have an oppportunity to in- /33
form ourselves particularly of the rest of the *Kurilski* islands; therefore we shall give the accounts of them that were communicated to me by Mr. *Muller*, which he had from the *Japanese*, who were shipwrecked upon the coasts of *Kamtschatka*.

Between Mr. *Muller*'s account and our's, there is some difference; for in his, *Onnecutan* is called the sixth island. However this might happen only on account of his reckoning the small islands also, which the *Kuriles* do not. According to his description, beyond the *Paromusir*, or the second *Kurilskoy* island, there are three more islands; *Sirinki* is reckoned the third; *Uyakoopa*, the fourth; and the *Kukumita*, or *Cucumiva*, the fifth; the *Sirinki* and *Kukumita* are smaller than *Uyakoopa*, which island is remarkable for a high mountain. The said islands are placed in a triangle; the *Uyakoopa* lying most north, and fartheft west; and the *Sirinki*, with regard to the former, south-east, and in the same longitude with *Paromusir*; and the *Kukumita* a little farther southward than the *Uyakoopa*. It seems that these islands in the General *Russian* map are expressed under the names of *Diacon*, *St. Iliab*, and *Galanta*, which are placed in a triangle, though their situation is not exactly the same as in the above description. The sixth *Kurilskoy* island, according to Mr. *Muller*, is called *Muska* and *Onnecutan*. The seventh is *Araumakutan*, is uninhabited, and there are some burning mountains as in *Kamtschatka*. On the eighth island *Sujaskutan*, which is as large as the former, some few people inhabit who are not taxed. From this island to the west lies the ninth called *Emarka*; and thence on the south-west side is the tenth island *Mashacbu*, which is small and uninhabited; and on the south-east side from the *Sujaskutan* there is a small island *Ebacbu*, which is reckoned the eleventh.

The

133 The twelfth island *Shockoeki* lies on the south side, and so distant from the *Sujaskutan*, that they can hardly row to it in half a day, even when the days are longest, in the lightest boat. It is said, that the *Japanese* carry ore from it in large vessels; but what ore is not known. The thirteenth island, and the following to the seventeenth, are called *Motogo*, *Shatovo*, *Utitir*, *Kituy*, and *Shimutir*. The *Utitir* lies somewhat to the east, and the rest in one line south. The channels are crossed in light boats, in less than half a day, but the passage is excessively difficult, because the tide runs very rapid in all of them; and, when it happens to be a side wind, these small vessels are driven into the sea, and lost; and for this reason the inhabitants of all these islands pass and repass these places early in the spring in calm weather. The *Motogo*, *Shatovo*, and the *Utitir* islands have nothing remarkable in them. On the island *Kituy* grow the
161 reeds of which they make their arrows. The *Shimatir* is larger than the rest, and has many people on it, who resemble the *Kuriles* of the first three islands in all respects, but are not under the *Russian* government, nor any other foreign power. The navigators who were sent by *Peter the Great*, only saw this island, beyond which no *Russians* ever were until the second *Kamtschatkoi* expedition.

133 The *Cheerpuy* is reckoned the eighteenth of the islands. It lies west at the mouth of the channel. On this is a very high mountain, but no inhabitants. Some people come there from the other islands to catch fowls and dig roots. The people of *Kituy* have sometimes heard firing of cannon on this island, as they relate, but on what account they know not. They likewise report, that formerly a *Japanese* vessel was lost upon it, whose people were taken by the inhabitants of the next island, and were sent to *Japan* to be redeemed.

000 The channel which divides the island *Shimutir* from the nineteenth island *Eturpu* is so broad, that one cannot see one island

island from the other; but from thence to the twentieth island *Urupe*, and from that again to the twenty-first *Kunatir*, the channels are much narrower.

The twenty-second and the last island near *Japan* the *Japanese* used to call *Matma*, but how broad the channel is between that and the former island *Kunatir* is not mentioned in Mr. *Muller's* account; but one may judge that it is not very wide, especially to the west, for reasons to be given hereafter. The island *Matma* is larger than any of the rest, and next to it in size is the *Kunatir*.

The natives of the *Eturpu* and the *Urupe* islands call themselves *Keek-Kuriles*. They have a particular language of their own, and resemble the natives of the island *Kunatir*, but we do not know whether their language is the same or not; neither are we assured whether the language of the *Keek-Kuriles* has any affinity with that of the *Kuriles* of *Kamtschatka* and the islands near it. This is to be observed that the *Japanese* say they call the natives of the last four islands by the common name of *Jeso*; from which we may conclude that the inhabitants of *Matma* are of the same race with the natives of the former islands, and the language is the same on all these four islands. Thus we may correct the errors of former geographers, who give the name of *Jeso* to a large country lying north-east of *Japan*, which now we find is made up of the above-mentioned islands. In this there is nothing contrary to the accounts that we meet with in the voyages of the *Europeans*, particularly of the *Dutch*, who in the year 1643 were sent to discover the land of *Jeso*. Some of the inhabitants of the islands of *Eturpu* and *Urupe* (which had a commerce with the natives of the islands near *Kamtschatka*, about 25 or 30 years ago) were taken captives on the island *Paromusir*, and were brought to *Kamtschatka*; and this probably put an end to their communication and traffick by sea. However these captives were useful; for the accounts received from the *Japanese* were explained

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

plained and corrected by them, and ſome new information obtained. According to them thoſe *Keek-Kuriles* on the iſlands *Eturpu* and *Urupe* are under no foreign ſubjection; but *Matma*, both by the account of *European* travellers and of the *Japaneſe*, has been for many years ſubject to *Japan*. They ſay alſo, that upon theſe iſlands are a great number of the *Kuriles* and *Kamtſchadales* in ſlavery, who had been formerly carried off. It is worthy of obſervation throughout all theſe iſlands, that ſuch as lie more weſternly have no wood, but thoſe that lie to the eaſtward have it in abundance, and conſequently there is great plenty of game. There is ſafe anchoring in the mouths of the rivers for large ſhips, in the iſland *Eturpu* particularly. The *Japan* ſilk, cotton ſtuffs, and all ſorts of iron houſhold furniture alſo, are brought to the iſlands *Eturpu* and *Urupe* by the natives of *Kunatir*, who purchaſe them from the inhabitants of *Matma*.

The inhabitants of *Eturpu* and *Urupe* make ſtuffs of nettles, which they ſell to the *Japaneſe*: they likewiſe ſell to them all ſorts of furrs, which they have among themſelves, and which are brought to them from the iſlands near *Kamtſchatka*; alſo dry fiſh and whale's fat, which is uſed in victuals by the natives of the iſland *Matma*. By the accounts of travellers, theſe things are carried even into *Japan*.

The iſland *Matma* lies from the ſouth-weſt to the north-eaſt. The *Japaneſe* have a ſtrong guard upon its ſouth-weſt point, perhaps with a view to defend the country from the *Chineſe* and *Koreans*. Not far from thence, upon the ſhore of the channel, which divides the iſland *Matma* from *Japan*, ſtands a *Japaneſe* city of the ſame name with the iſland, where are kept all ſorts of ammunition, muſkets, and guns for defence, and in which where lately built new fortifications. Moſt of the *Japaneſe* ſettlements upon *Matma* were made by people baniſhed thither. The *Japaneſe*, who were brought to *Kamptſchatka*, give us the ſame accounts of the channel between *Matma* and *Japan*, which we

we find in the *European* voyages; namely, that this channel is very narrow in ſeveral places, and very dangerous, on account of ſeveral rocky capes projecting into it from both ſides. At ebb and flow the ſea is ſo rapid that if the leaſt time is loſt the veſſels will be either daſhed againſt the capes, or carried into the ſea. The Dutch relate that they have found a ſmall iſland eaſtward of theſe, which they named the States' Iſland; and farther towards the eaſt, they ſaw a great land, which they named the Company's Land, and imagined it to be part of the continent of *North-America*. We can give no ſatisfactory information of theſe things from any accounts received from the *Japaneſe*, but the Company's Land ſeems to be the ſame with the land diſcovered by *De Gama*, and it ought to be conſidered rather as an iſland than the main land; becauſe *America*, by all the obſervations made between *Japan* and *New Spain*, cannot extend ſo far to the weſt. In theſe accounts collected by profeſſor *Muller*, we have only to correct the general ſituation of the *Kurilſki* iſlands, which do not extend to the ſouth, as he was informed, but lie in a row to the ſouth-weſt, as I have ſhewn above, and as they are laid down in the General *Ruſſian* Map: for it is well known by the new maps, and from the verbal accounts of the *Japaneſe*, who have been there, that the channel *Teſſoy*, which reaches along the *Chineſe* coaſt, S. S. W. is only 15 verſts broad; but, according to his account of the ſituation of the iſlands, it ought to be conſiderably wider to the ſouth. In ſhort, if captain *Spanberg*'s deſcription of the *Kurilſki* iſlands to *Japan* could be reconciled with Mr. *Muller*'s, then the exact ſituation of each of them would be known, and their diſtances from each other aſcertained; of which we can only now judge by conjecture.

Mr. *Spanberg* gives only two of the iſlands which conſtitute *Jeſo* their proper names; namely, *Matma* and *Kunatir*; but he diſtinguiſhes the iſlands *Eturpu* and *Urupe* by the names of the *Green* and the *Orange* iſlands: and as thoſe iſlands, except *Matma*,

 are

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

are described, and both their size and situation laid down, there seems to be no doubt but that the cape *Tessoy* is the north-west point of the island *Matma*, which was observed by the *Russians* only from the east side of *Japan*; and though in the above accounts of Mr. *Muller*, it, being said to lie from south-west to north-east, may occasion some doubt, yet we may reconcile it in this manner; that the nearest point of *Matma* to *Japan* extends towards *China* from the S. E. to the N. W. and to the *Kurilski* side from the S. W. to the N. E. as it is expressed in the *Chinese* maps, in which are only wanting the divisions between the islands of *Jeso*. The channel between *Japan* and the island *Matma*, according to the new maps, in some places is 20 versts, and in others much less. The north part of the island *Japan*, or *Niphon*, is a little above the 40th degree of latitude.

The accounts of the great plenty of wood on the islands nearest to *Japan* are confirmed by Mr. *Steller*, who says, that, in general, the islands lying farthest to the west from *America* are the most fruitful, and abound with trees of various kinds, among which are lemons, bamboe, *Spanish* canes or reeds, and poisonous herbs, whose roots are as yellow as saffron and as thick as rhubarb, and are well known to the inhabitants of the first *Kurilskoy* island, for they formerly bought them from the natives of those islands, and used to poison their arrows with the juice. Vines also grow there; and I have tasted some grapes which Lieutenant *Walton* brought from those islands in his return from *Japan*. Upon the island *Kunatir*, there are great numbers of pine, larch, and fir trees, but a scarcity of good water. Wild animals they have in abundance, particularly bears, whose skins the inhabitants use for their cloaths. The natives of this island, by his account also, wear long silk cloaths like the *Chinese*, have long beards, pay no regard to cleanliness, and feed on fish and whale's fat. Their bedding is of wild goats' skins, of which there

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

there are plenty. They acknowledge no ſovereign, though they 000
live near *Japan*. The *Japaneſe* come to them every year in their ſmall craft, and bring all ſorts of iron ware, brazen pots, wooden lackered waiters and bowls, leaf of tobacco, and ſilk-and-cotton ſtuffs, which they exchange with them for whales' fat and the ſkins of foxes; but they are not ſo good as thoſe of *Kamtſchatka*. The natives of the iſland of *Kunatir* told the *Ruſſians* to beware of thoſe of the iſland of *Matma*, becauſe they had cannon, aſking our people at the ſame time, whether they came from the North, and if they were thoſe who are famous for their armies, and able to wage war with, and conquer, every nation. The language of the iſland *Kunatir* is almoſt the ſame with that ſpoken in the iſland *Paromuſir*: from hence we may conclude, that the natives of *Eturpu* and *Urupe* differ little in their language from the *Kurilſki*. The inhabitants of theſe iſlands are ſaid to call themſelves 101
Keek-Kuriles; but the word *Kuriles* being corruptly uſed by the *Coſſacks* for the word *Kuſhi*, (which is a common name for the natives of the *Kurilſki* iſlands) it is more probable, that, if the natives of *Eturpu* and *Uturpe* do diſtinguiſh themſelves by the addition of the word *Keek*, they are called *Keek-Kuſhi*, and not *Keek-Kuriles*.

CHAP. IV.

Of AMERICA.

THE following accounts of that part of *America* which lies directly eaſt from *Kamtſchatka*, are collected from notes taken out of Mr. *Steller*'s journal.

The main land of *America*, which is now known from 52 to 60 degrees of north latitude, extends from the ſouth-weſt to the north-eaſt ſide, at almoſt an equal diſtance from the coaſt of *Kamtſchatka*; namely, about 37° in longitude: for the coaſt of *Kamtſchatka* alſo lies in the ſame direction, in a ſtrait line from the *Kurilſkaya Lopatka* to the *Tchukotſkoi* Noſs, excluding the gulphs and capes; inſomuch that it may be reaſonably concluded, that theſe lands were once joined, eſpecially at the *Tchukotſkoi* Noſs; for between it and the land, which lies eaſt over againſt it, it is not above two degrees and a half. Mr. *Steller* offers four reaſons to prove the ſame. 1ſt. The appearance of the coaſt which, both of *Kamtſchatka* and *America*, ſeems to be tore off. 2d. Many capes project into the ſea from 30 to 60 verſts. 3d. Many iſlands are in the ſea which divides *Kamtſchatka* from *America*. 4th. The ſituation of the iſlands, and the ſmall breadth of that ſea. But, however, this is left to the judgment of the learned; it is enough for us to relate facts. The ſea that divides *Kamtſchatka* from *America* is full of iſlands, which extend from the ſouth-weſt point of *America* to the channel of *Anianova*, one following another, as the *Kurilſki* iſlands are to *Japan*. The iſlands lie in a row from 51° to 54° of latitude, to the eaſt, and begin a little above 5° from *Kamtſchatka*. Mr. *Steller* thinks, that between the *Kurilſki* and *American* iſlands is to be found the

the company's land, but ſeveral doubt this; for, according to 000
his opinion, that land ought to be the baſe of the triangle of the *Kurilſki* and the *American* iſlands; this would be probable, if the company's land ſhould be rightly laid down in the maps.

America enjoys a much better climate than the coaſt of the north-eaſt ſide of *Aſia*, although equally near the ſea, and every where full of high mountains, which are continually covered with ſnow; but they have greatly the pre-eminence when we compare their qualities with thoſe of *Aſia*. The mountains 137
of *Aſia* being every where rocky and ragged, they loſe their compactneſs and internal native heat; for which reaſon they have no valuable metals, nor any trees or herbs, and in the vallies there grows only ſmall ſhrubby wood and hardy herbs. The *American* mountains are cloſe and their ſurface not covered with moſs, but with a fruitful earth, for which reaſon they are cloathed from the bottom to their tops with a thick and fine wood. The herbs that grow at their feet are of that kind that grow in dry places, but not in marſhes; and the ſame herbs grow in the vallies as on the very tops of the mountains, becauſe there is every where an equal warmth and moiſture. But in *Aſia* it is quite different, for the ſame herb grows twice as high in the plain as in the mountains.

In *America* at 60° the coaſt is covered with wood; but at *Kamtſchatka*, which is only 51° of latitude, the ſmall willows and poplars do not grow nearer the ſea than 20 verſts, and birch wood not nearer than 30, nor the pitch wood along the river *Kamtſchatka* nearer than 50 from its mouth: and in *Kamtſchatka*, in 62°, not one tree is to be found. In Mr. *Steller*'s opinion *America* extends from the before-mentioned latitude to 70° and farther, and is defended and covered from the weſt by the above wood; but on the coaſt of *Kamtſchatka*, eſpecially upon the *Penſchinſka* ſea, it is quite barren, being open to the violent

137 violent north winds, which blow here frequently; and we find that places lying farther north are more fruitful, as about the *Tchukotſkoi* Noſs, where they are covered from theſe winds.

000 It is likewiſe obſerved, that the fiſh enter the rivers in *America* earlier than in *Kamtſchatka*. Great plenty of fiſh have been ſeen there on the 20th of *July*, at which time in *Kamtſchatka* they only begin to appear. There are a ſort of raſberries of a very extraordinary ſize and fine taſte; beſides honeyſuckles, cranberries, blackberries, and bilberries in great plenty.: as alſo ſeals, ſea-beavers, whales, dog-fiſh, marmotta-minor, red and black foxes which are not ſo wild as in other places, perhaps becauſe they are ſeldom hunted.

Among the known birds have been obſerved magpies, crows, ſea-gulls, water-cranes, ſwans, ducks, quails, plovers, *Greenland* pigeons, and fowls called northern ducks; and among the unknown, ten kinds diſtinguiſhable from any ſpecies of *European* fowl.

171 The natives there,[1] who are as wild as the *Koreki* and the *Tchukotskoi*, are plump, broad ſhouldered, ſtrong boned, of a middle ſize, with ſtreight and black hair which hangs looſe. Their faces are ſwarthy and flat, their noſes ſomewhat pointed but very broad, with black eyes, thick lips, ſmall beards, and ſhort necks. Their ſhirts, which come lower than the knee, are girded about their bellies with leather ſtrings; and their breeches and trowſers are made of the ſkins of ſeals dyed with alder, and are like thoſe of the *Kamtſchatdales*. To their girdles they hang iron knives in caſes, like thoſe worn by the *Ruſſian* boors. Their hats are made of graſs, as thoſe of the *Kamtſchatdales*, without tops, in the ſhapes of umbrellos, dyed with green and red colours, with falcons' feathers before, or with graſs that is combed out, which looks like the plumage that the *Americans* uſe about *Brazil*. They feed on fiſh, ſea animals, and the ſweet herb, which they prepare

1. [in America across from Kamchatka]

prepare as the *Kamtſchatdales* do; beſides they uſe the dry bark /7/ of the poplar and pine trees, which is eaten as food, not only here and in *Kamtſchatka*, but in all *Siberia*, and ſome parts of *Puſſia*, even as far as the province of *Viatka*, eſpecially in times of ſcarcity; they uſe likewiſe ſea-graſs laid up in heaps, which looks like, and is as tough as, leather thongs. Wine and tobacco they know not, which ſerves as a real proof of their having had hitherto no communication with the *Europeans*. They eſteem it a particular ornament to make holes on their faces in different parts, in which they place various ſtones and bones; others wear in their noſtrils feathers about two inches long; ſome wear bones of the ſame ſort in their under lips, and others upon the forehead. The people who live on the iſlands near the *Tchukotſkoi* Noſs, and who have a communication with the *Tſchuktſchi*, are certainly of the ſame race, for among them it is always eſteemed as an ornament to wear bones. The late major *Paulutſkoy* having had once a ſkirmiſh with the *Tſchuktſchi*, found among the dead two men of this country, under whoſe noſes were placed two teeth of the ſea-horſe, in holes made for that purpoſe; for which reaſon the natives call thoſe iſlanders *Zoobatee*, or large teethed; and, as the priſoners reported, they did not come there to aſſiſt them, but to ſee their manner of fighting with the *Ruſſians*.

It may be concluded from this, that the *Tſchuktſchi* and they have the ſame language, or, at leaſt, that there is ſuch a near reſemblance between their languages, as to enable them to converſe together without an interpreter. The language of the *Tſchuktſchi* is derived from that of the *Koreki*, and differ from it in dialect only; the *Koreki* therefore can converſe with them without difficulty. And Mr. *Steller*'s ſaying, that not one of our interpreters could underſtand the *American* language, might ariſe from the great difference in the dialect, or from the particular pronunciation, which is obſerved, not only between the wild

/7/ wild natives of *Kamtſchatka*, but alſo between the *Europeans* in different provinces. There is ſcarce one ſort in *Kamtſchatka* which does not differ in language from that of another; and thoſe ſorts of ſome hundred verſts' diſtance hardly underſtand one another. The *Americans* and the *Kamtſchadales* agree in the following things: Firſt, their features are alike. Secondly, the *Americans* prepare the ſweet herb in the ſame manner as the *Kamtſchadales* do, which has never been obſerved any where elſe. Thirdly, they both uſe wood in ſtriking fire. Fourthly, it has been obſerved, from many inſtances, that their hatchets are made of ſtone or bone; and Mr. *Steller* thinks, not without reaſon, that the *Americans* had formerly a communication with the people of *Kamtſchatka*. Fifthly, their wearing apparel and hats are the ſame. And, ſixthly, they dye the ſkins of beaſts with alder, as the *Kamtſchatdales* do: from whence it appears probable, that they are of the ſame race. Theſe particulars may help to anſwer the queſtion, Whence was *America* peopled? for though we ſhould grant, that *America* and *Aſia* were never joined, yet theſe two parts of the globe lie ſo near each other, that the impoſſibility of the inhabitants of *Aſia* going over to *America*, (eſpecially as the number of iſlands lying between them made the paſſage more eaſy) cannot be maintained.

Their arms are the bow and arrow; but what ſort of bows we cannot tell, for our people ſaw none of them. Their arrows indeed are longer than thoſe of the *Kamtſchadales*, but reſemble intirely thoſe uſed by the *Tunguſki* and *Tartars*, which our people found were dyed of a black colour, and ſcraped ſmooth. The *Americans* uſe boats made of ſkins, as the *Koreki* and the *Tſchuktſchi* do. Their boats are 12 feet long and two broad, the head and ſtern ſharp, and the bottom flat. The inſide is made of poles joined at both ends, which are kept extended by a proper piece of wood; and the ſkins ſewed round ſeem to be thoſe of ſeals dyed of a cherry colour: the ſeat is round,

two

two yards from the ſtern, and ſewed about with guts, which, /71/
with the help of leather thongs laced round the edges, can be drawn together and opened like a purſe. The *American* ſitting in this place ſtretches out his legs, and draws the ſkin tight about his body. Theſe boats will live in the moſt ſtormy ſea, though they are ſo light that they may be carried with one hand.

When the *Americans* ſee any ſtrangers they row towards them, making a long ſpeech; but whether this be ſome conjuration, or a ceremony at receiving them, we cannot certainly ſay; for both the one and the other is in uſe among the *Kuriles:* but, before they approach them, they paint their cheeks with a black pencil, and ſtop their noſtrils with graſs. They ſeem to receive ſtrangers very kindly, converſe in a friendly manner, with their eyes fixed upon them, treat them with great civility, and make them preſents of whales' fat, and of thoſe pencils with which they daub their own cheeks, not doubting but ſuch things are as acceptable to others as to themſelves.

It is very ſafe ſailing in thoſe parts in the ſpring and ſummer; ooo
but in the autumn ſo dangerous, that there is not a day on which they dare venture out for fear of periſhing; the winds and ſtorms being ſo violent, that the *Ruſſians*, who have uſed the ſea for forty years, declare they have never ſeen any thing equal to them. The following are looked upon here as ſigns of the land being near: When many different ſorts of ſea-cabbage appear floating on the ſea; when they obſerve that ſort of graſs of which cloaks, carpets, and little bags are made at *Kamtſchatka*, for it grows only upon the ſea ſhore; and when ſea-gulls and ſea animals, ſuch as ſeals and the like, appear in great numbers; for though, the ſeals have an opening in their hearts, called the *Foramen ovale*, and a paſſage called *Ductus arterioſus botalli*, which are both open, and therefore can keep under water for a long time, and

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

may go far from the ſhore without danger, as they can find proper food at a great depth; yet, notwithſtanding all this, they ſeldom go out above ten miles to ſea. But the moſt certain ſign of the land being near, is, when they ſee *Kamtſchatkoi* beavers, which feed only upon lobſters and crabs, and, by the formation of their hearts, cannot continue under water above two minutes.

We muſt yet mention ſome iſlands, which lie near to *Kamtſchatka*, though not in a ſtrait line with thoſe above-deſcribed, but north of them, particularly *Bering*'s iſland, which is now ſo well known to the *Kamtſchatkoi* inhabitants, that many go thither for the trade of ſea beavers and other animals. This iſland extends between 55° and 60° of latitude from the ſouth-eaſt to the north-weſt. Its north-eaſt end, which lies almoſt directly oppoſite to the mouth of the river *Kamtſchatka*, is about two degrees from the eaſtern ſhore of *Kamtſchatka*, and its ſouth-eaſt point is about three degrees from the *Kronotſkoy* Noſs. The length of this iſland is 165 verſts, but its breadth is unequal, being from the ſouth-eaſt point to the ſteep and unpaſſable cliff, which lies fourteen verſts from the point, between three and four verſts in breadth; from this to the *Seepucha* bay about five verſts; from the *Seepucha* bay to the *Beaver* cliff, ſix verſts; and thence to the ſmall river *Kitova*, five verſts. Farther on it grows broader and broader; and its greateſt breadth is oppoſite to the northern cape, where it is twenty-three verſts. One may ſay in general, that there is ſo little proportion between the length and breadth of this iſland, that our author doubts whether its equal is to be found in any other part of the world; at leaſt, he has neither read nor heard of ſuch; and he ſays alſo, that the iſlands which he ſaw near *America*, and the whole range of them towards the eaſt, have nearly ſuch proportions.

This

This iſland conſiſts of one rocky ridge divided by many vallies 000
lying north and ſouth; and the mountains are ſo high that, in fair weather, they may be perceived almoſt in the middle of the paſſage between the iſland and *Kamtſchatka*.

The natives of *Kamtſchatka* were of opinion for many years, 823
that over-againſt the mouth of the *Kamtſchatka* there ought to be land; becauſe there was always the appearance of a fog or miſt there, let the horizon be ever ſo bright. The higheſt moun- 000
tains here are not higher than two verſts perpendicular; the tops are covered for the thickneſs of half a foot with a common yellow clay; but below are hard yellow rocks. The *Stanovoy* ridge is hard and entire; and the mountains upon the ſides are ſeparated by vallies, through which run ſmall rivers on both ſides of the iſland. It is obſervable in this iſland, that the mouths of all the rivers lie either to the ſouth or to the north, and from their ſprings they either run ſouth-eaſt or north-weſt.

There are no plains near the principal ridge, except the ſea-ſhore, and even there are little mountains of half a verſt, or a verſt, in circumference. Such hills are obſerved near every rivulet, with this difference, that the flatter the capes are towards the ſea, the larger are the plains behind. The very ſame thing is alſo obſerved in the vallies: if they lie between high mountains, they are leſs, and the rivulets in them alſo ſmaller; but in thoſe vallies which are between low mountains, it is otherwiſe. On the *Stanovoy* or principal ridge, wherever the mountains are ſteep and full of cliffs, there are always found lakes half a verſt, or a verſt, from the ſea-ſhore, which run by ſmall outlets into the ſea.

The mountains conſiſt of one hard blue ſtone; but where they are parallel with the ſea, there the capes are made up of a ſtrong greyiſh clean ſtone, fit for poliſhing. This circumſtance the author eſteems worthy of obſervation, becauſe he imagines the ſtone might obtain this change from the ſea-water.

In many places of the iſland the beach is ſo narrow, that it is hardly poſſible to paſs it at high water; and in two places there is no paſſage at all: one of theſe is near the ſouth-eaſt, and the other near the north-weſt point of the iſland.

It is remarkable, that wherever there is a bay on one ſide of the iſland, on the other, directly oppoſite to it, is a cape; and where the ſhore on one ſide is flat and ſandy, on the other it is rocky and torn. Where the turning is ſharp, either to one ſide or the other, there the ſhore is cliffy and ſtony about a verſt or two from the turning. The mountains nearer the *Stanovoy* ridge are rather the ſteepeſt. There are many cracks which were occaſioned at different times by earthquakes; and it has been obſerved, that in the higheſt mountains ſomething ſticks out like kernels, ending as cones; which, though they ſeem to be of the ſame ſubſtance with the mountain itſelf, yet are ſomewhat ſofter and clearer, and have a particular figure. Such kernels are found on the mountains of *Baykal*, and on the iſland *Olchon*. Mr. *Steller* received from *Anadirſk* ſtones of a green colour ſomewhat reſembling theſe kernels, and was informed that they were taken from the top of the mountains; and that whenever they are broken off, others grow in their places. It is thought that theſe ſtones are formed by ſome internal motion of the earth, particularly by its preſſure towards the center; from whence theſe kernels may be reckoned a ſpecies of chryſtal, or the pureſt ſtony matter, which is firſt preſſed from the center in a liquid ſtate, and afterwards hardened by the external air.

On the north-eaſt ſide of the above-mentioned iſland is no haven, even for the ſmalleſt veſſel, except one place which is in breadth 80 fathoms, where a veſſel may anchor in calm weather. There are ſhoals that lie off as far as four or five verſts from the ſhore, which are laid with ſtones as if done by deſign, and on which you may walk at low water to the deep places without wetting your feet.

North

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North of the haven is a large bay, in which are ſuch ſtones and pillars as are found on the ſhore. The ſouth-weſt ſide of the iſland is quite different; for though the ſhore is rocky and more torn, yet in two places there is a paſſage for flat-bottomed boats, not only to that, but even into the lakes. The firſt place is 50, and the ſecond is 115, verſts from the ſouth-eaſt point of the iſland. This laſt is eaſily known from the ſea, for the land turns there from north to weſt; and in the very cape runs a river, which, though ſmall, is the largeſt in that iſland, and the depth of it at high water is ſeven feet. It runs out of a great lake, which is a verſt and a half from its mouth; and as the river is deeper when they have paſſed the bar, the ſailing to the lake in ſmall veſſels is very eaſy and ſafe. The principal mark by which they can know this river is an iſland ſeven verſts round, and it lies ſeven verſts ſouth from the mouth of it. The ſhore from thence to the weſt, for five verſts, is ſandy and low, and there are no rocks. From the high mountains of this iſland are to be ſeen the following places: in the ſouth, two iſlands; one of them in circumference ſeven verſts, as was ſaid before; and the other is in the ſouth-weſt, oppoſite to the very point of *Bering*'s iſland, and at the diſtance of 14 verſts. It conſiſts of two high and ſplit rocks, about three verſts in circumference. From the very north-weſt point of *Bering*'s iſland, in clear weather, are ſeen mountains covered with ſnow; and the diſtance of them from thence may be reckoned about 100 or 140 verſts. Theſe mountains were taken by the author for a cape of the main-land of *America*, for the following reaſons: firſt, becauſe the mountains, as he judged by their diſtance, were higher than thoſe of the iſland: ſecondly, becauſe within the ſame diſtance on the eaſt from the iſland there were plainly obſerved ſuch other white mountains; from the height and direction of which, all were of opinion that it

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

it was the main land of *America*. From the ſouth-eaſt point of *Bering*'s iſland they ſaw lying ſouth-eaſt ſome other iſlands, but not ſo plainly; and their ſituation was thought to be between *Bering*'s iſland and the continent. It has been obſerved, that above the mouth of the river *Kamtſchatka*, towards the weſt and ſouth-weſt, in clear weather, there is always a fog; and from that, in ſome meaſure, it was known that *Bering*'s iſland was not far from the country of *Kamtſchatka*. To the north part of *Bering*'s iſland there is another, in length from 80 to 100 verſts. The channel betwixt theſe iſlands, towards the north-weſt, is about 20 verſts, and towards the ſouth-eaſt, about forty. Near the points of both are many rocks and pillars in the ſea.

The weather differs from that of *Kamtſchatka* only in being more ſevere and ſharp; for the iſland has no cover from any point, and is narrow and without wood. The wind is ſo ſtrong in the low and narrow vallies that a man can hardly keep his feet, and it was obſerved to be higheſt in the months of *February* and *April*, when it blowed from the ſouth-eaſt and the north-weſt; when from the former, the weather was clear and tolerable, and, when from the latter, it continued clear, but was very cold. The higheſt tides were in the beginning of *February*, when the wind was north-weſt; and in the middle of *May*, from the great rains and the melting of the ſnow, another flood happened; yet both theſe floods were moderate, compared to thoſe which, undoubtedly, have been formerly in thoſe iſlands; for thirty fathoms higher than the ſea-mark, lie wood and whole ſkeletons of ſea animals, which have been left by the ſea; and it is probable that in the year 1737, the flood was as great here as at *Kamtſchatka*. Earthquakes happen frequently. The greateſt here, which laſted exactly ſix minutes, was felt in the beginning of *February*, when the wind was weſternly; a great

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great noiſe, which preceded the ſhock, was heard under ground, attended with a whiſtling wind, which went from ſouth to north.

The water here is remarkable for its lightneſs and purity; and its medicinal virtues have been experienced by the ſick. Every valley has its rivulet, and the number of them all is above ſixty. By reaſon of the great declivity of the vallies they are very rapid; and, near the ſea, divide themſelves into many ſtreams.

THE

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

THE NATURAL HISTORY OF

KAMTSCHATKA.

PART II.

CHAP. I.

137 *Of the* SOIL.

UPON the banks of the river *Kamtſchatka* is found plenty of roots and berries, which in ſome meaſure ſupply the want of corn. There is alſo wood ſufficient not only for building houſes, but even for ſhip-building; and Mr. *Steller* is of opinion, that near the head of this river, both ſummer and winter corn would grow as well as in any other places in the ſame latitude, the ſoil being deep and rich; and though ſnow falls in very great quantities, yet it thaws early enough, and the ſpring is not ſo rainy, nor have they ſuch damps, there as in many other places. Several tryals of ſummer-corn have been actually made both in the upper and lower *Oſtrog* * of *Kamtſchatka*; in which both barley and oats have ſucceeded. At the monaſtery of our Lord of *Jakutſki*, they have

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* *Oſtrog* is a little town fortified with palliſades, where the *Ruſſian* Coſſacks, and other inhabitants live.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

134 ſeveral years paſt ſown ſeven or eight poods † of barley, which
241 yielded a crop not only ſufficient for groats and meal for their own uſe, but even enough to ſupply their neighbours, though they are obliged to plough their land with men.

All garden ſtuff thrives not alike; the moſt ſucculent produce only leaves and ſtalks. Cabbage and lettice never grow to any head, and the peas continue in flower until late in the harveſt without yielding ſo much as pods; but garden roots which are full of juice, ſuch as turnips and radiſhes, grow very well. Theſe tryals, however, were only made upon the banks of the Great River and *Awatſcha*. Such things as require a hot ſoil, grow very well every where, but ſtill beſt upon the *Kamtſchatka*. Upon the Great River I never ſaw any turnips larger than three or four inches diameter; but upon the *Kamtſchatka*, I have ſeen them four or five times as big.

137 The graſs grows here ſo high, and is ſo full of ſap that one ſcarcely ſees any thing like it in all the empire of *Ruſſia*; near the river and lakes, and in the opening of the woods, it riſes to above the height of a man, and ſo faſt that it may ſometimes be mowed thrice in a ſummer; ſo that few places can be more proper for breeding of cattle; and although the blades are thick and high, and make but a coarſe ſort of hay, yet the cattle are large and fat, and give plenty of milk both ſummer and winter, which I attributed to the richneſs of the ſoil and the ſpring rains. The graſs continues full of juice, even to the beginning of winter, which being condenſed by the cold prevents the graſs from turning hard during that ſeaſon. As the graſs is ſo high and thick, a great deal of hay may be made upon a ſmall ſpot; and the cattle can find food in the fields all the winter. The places where
132 the graſs thus grows are never ſo much covered with ſnow as the bogs and ſwamps, and for this reaſon it is difficult to travel over them in the winter.

† A pood is a *Ruſſian* weight of 40 lb.

In

In other places lying upon the Eastern Ocean, either to the N. or S. of *Kamtschatka*, there is no land fit for culture; for all that is near the shore is either sandy, stony, or boggy, and the banks are so narrow, that if the ground was good, yet there is not enough for agriculture; and there are but very little hopes of the land about the *Penschinska* sea answering better, especially for winter-corn, it being all marshy and boggy. At some distance from the sea are found woody places which are dry and high, and appear not improper for corn; but the snow which falls in the beginning of the harvest before the earth is frozen, and lies generally deep upon these places 'till the middle of *May*, both prevents the sowing of the summer-corn, and destroys the winter-corn; and, because at the thawing of the earth the corn would be blasted by the evening frosts, it is impossible to sow any before the middle of *June*; after which time to *August* are continual rains, so that sometimes the sun is not seen for fourteen days together: this would cause the corn to grow very high and full of juice; but, for want of warm and dry weather, it would never ripen. Notwithstanding, Mr. *Steller* thinks, that if the ground was properly prepared, oats and barley might ripen there; but this is much to be doubted, until, at least, further tryal can be made; for I have myself several times sown barley upon the Great River, and it grew well in thickness, height, and strength of blade 'till the beginning of *August*, when, just as the ear was putting forth, all of it was destroyed by the frost.

All these barren places, not only near the *Penschinska* sea, but even within the land, appear to be composed of earth brought from other parts. This one may discover by the different strata, and perceive how they have encreased yearly on the banks of the rivers, which are high, and on the cliffs that are bare. I have seen hanging out of the earth, trees which are not to be found in that country, more than seven feet deep under the surface. Hence it may be concluded, that all these barren, boggy places, where at

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

134 present are no woods, but only ſhrubs, and ſtunted ſallows, and birches, were formerly covered with water, which has decreaſed by degrees here, as it has upon the north-eaſtern coaſt. Below the earth lies a bed of pure ice, extremely hard; and under that a ſoft wateriſh clay, with gravel; this continues from the ſea up to the very mountains, and will ſufficiently account for the barrenneſs of theſe parts. But, though the land is not every where fit for agriculture, yet ſome places upon the river *Kamtſchatka* (which have been already mentioned) and along the *Biſtroy* river, are ſufficient to furniſh with corn, not only the inhabitants, but alſo the neighbouring parts. It is however to be feared, that the burning of the woods, in order to clear the lands, may drive away the ſables, who have a particular averſion to ſmoke: this happened upon the river *Lena*, formerly the beſt hunting country, but now deſerted by theſe animals.

137 The ſcarcity of wood is a great inconvenience, both the *Ruſſians*
313 and natives being obliged to fetch it twenty or thirty verſts with
489 great trouble and loſs of time, for the neceſſary uſes of boiling their ſalt and curing their fiſh: and it is very difficult to bring it down in floats, becauſe the current is rapid and ſo ſhallow, that they can bring only two little bundles on each ſide of a ſmall fiſhing-boat; otherwiſe they would obſtruct themſelves in the management of their boat, and thereby run the riſk of being driven upon the rocks, ſand-banks, and trunks of trees, where not only their boat and wood, but frequently the people themſelves are loſt. Sometimes the ſcarcity of wood is ſupplied by ſuch as is thrown up by the ſea, which the inhabitants gather upon the ſhore; but this wood that has been ſoaked in the water, although they are at great pains to dry it, never burns clear, but ſmothers away with a continual ſmoke very hurtful to the eyes.

137 At the diſtance of 30 or 40 verſts from the ſea, and near the
313 heads of the rivers, grow birch-trees, alder, and poplar; of which the people build their houſes and make their boats. But this

this they bring down with great difficulty, using the method above mentioned: for which reason a very poor house will cost here 100 rubles and more, and a small fishing-boat five rubles. In other places, where the hills are nearer the shore, and the water-carriage easier, wood for firing and building is much cheaper. 137 313

Upon the *Bistroy* river, which falls into the Great River below the *Bolscheretskoi Ostrog*, grows the best wood that is in these parts; even the birch-trees are so large, that captain *Spanberg* built a sloop with their wood, in which he made several distant voyages to sea. 137

It is very remarkable, that when this vessel was launched she lay as deep in the water as a vessel full loaded; and it was believed, that she never would be fit to go to sea, but that the smallest loading would sink her. But, when she was laden, she drew very little more water, and few vessels sailed better or lighter, or could go nearer the wind: the reason of which may be, that as this wood has not so much rosin, it sucked a greater quantity of water at first, but so soon as its parts were once filled, it then sucked very little more.

There is great plenty of wood upon the eastern coast of *Kamtschatka*; from the hills down to the very shore grow very fine birch and alder trees. Beyond the river *Jonpanoba*, and towards its head, begin the woods which continue to the *Kamtschatka*, *Lopatka*, and along the river *Kamtschatka* to the mouth of the river *Elouki*. Up the river, almost to its head, grow likewise pines, but not large enough for buildings. About the neck of land which joins the peninsula of *Kamtschatka* to the continent, the wood begins again to fail.

The changes of the weather and air are commonly in the following order: harvest and winter make up more than one half of the year; and the spring and summer cannot be reckoned 132

above

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132 above four months: the trees commonly begin to bud about the end of *June*, and ſome of them to loſe their leaves in the month of *Auguſt*.

The winter is moderate and conſtant, ſo that there are neither ſuch ſevere froſts nor ſudden thaws as in *Jakutſki*. The mercury in *de l' Iſle*'s thermometer was between 160 and 180 degrees. From the ſevere froſts that we had two years following in the month of *January*, it fell to 205 degrees. The month of *January* is always their coldeſt month; and at that time the mercury was between 171 and 200 degrees.

The ſpring weather is pleaſanter than the ſummer; when, although it ſometimes rains, yet now and then there are fine clear days. The ſnow lies to the end of *May*, which with us is reckoned the laſt ſpring month.

The ſummer is for the moſt part very diſagreeable weather, rainy and cold *; the reaſon of which is the continual damps from the neighbouring mountains being covered with ſnow that never melts. It frequently happens, that for a week or two the ſun does not appear: and during all the time that I was there we had never one whole week of fair weather, never one day ſo clear but the mornings were foggy; and there fell, as it were, a ſmall drizzling rain, which continued 'till twelve o'clock. From this moiſt air and the neighbouring hills it is ſo cold, that one can never be without warm cloathing.

I never obſerved either violent rains or loud thunder; for the rains are ſmall, and the thunder reſembles ſome rumbling noiſe under the earth. The lightning is alſo very weak.

In the *Oſtrog* upon the Great River, where the air is warmer, the mercury in the thermometer changed from 130 to 146 degrees; and by an extraordinary heat, that happened two different years in the month of *July*, it roſe 118 degrees.

* This is to be underſtood of the country about the Great River and the *Penſchinſka* ſea; in other places the ſummer is tolerable, as will be mentioned hereafter.

The

The inconſtancy of the ſummer weather not only occaſions the unfruitfulneſs of the land, but is likewiſe a great hindrance to the people in preparing their fiſh againſt the winter; ſo that, although there is vaſt plenty of fiſh, they are not able to prepare ſo much as to prevent a ſcarcity before the winter is over; nor can they preſerve one fiſh out of ten which they hang up to dry, the continual wet breeding worms which conſume it; ſo that the fiſh which the dogs and bears catch themſelves and lay up, ſells very dear in the ſpring. 132 251

In the more diſtant places from the ſea, and eſpecially about the upper *Kamtſchatka Oſtrog*, the weather is very different; it being fine and clear from the month of *April* to the middle of *June*. The rains begin after the ſummer ſolſtice, and continue to the end of *Auguſt*. Deep ſnows fall in the winter; but high winds ſeldom happen, and, when they do, are but of ſhort continuance: and although there does not, perhaps, fall more ſnow than upon the Great River, yet it is deeper, as it lies lighter. 132

The harveſt weather is generally agreeable and clear, except at the end of *September*, when ſtorms frequently happen. The rivers are generally frozen over in the beginning of *November*; for their ſwift current prevents their freezing in moderate froſts. Upon the *Penſchinſka* ſea the winds are generally in the ſpring ſouth-ſouth-eaſt and ſouth-weſt; in the ſummer, weſt; in the autumn, north and north-eaſt; in the winter before the ſolſtice, uncertain; but after that, to the month of *March*, the north-eaſt and eaſt winds prevail. From theſe winds the ſpring and ſummer, before the ſolſtice, are generally thick and heavy; but the weather in the months of *September*, *October*, *February*, and *March*, is more agreeable, and is the time for trade and long journies. In *November*, *December*, and *January*, there is little clear good weather, but heavy ſnows and great drifts, which in *Siberia* they call *Pourgami*. The eaſt and ſouth-eaſt winds blow long and moſt violently, ſometimes for two days together, and with ſuch vehemence, that

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132 that a man cannot ſtand upon his feet. Theſe winds, which
136 generally rage the three laſt-mentioned months, bring a great quantity of ice upon the ſhore of the *Lopatka* and *Awachinſkaya* bay, with a multitude of ſea-beavers: about this time, therefore,
132 is their beſt ſeaſon for catching theſe animals. The north winds, either in ſummer or winter, bring agreeable clear weather; but the ſouth and ſouth-weſt winds in ſummer are attended with rain, and in winter with ſnow. And although the cold is not ſo great, yet the air is always heavy and thick, and at ſea generally attended with great fogs, as our people, who went upon the *American* and *Japan* expedition, experienced: therefore ſailing in ſuch weather is as dangerous as living upon the land is diſagreeable; and this agreement of the weather of *Kamtſchatka* with what is found far out at ſea is to be attributed not only to neighbouring countries, but likewiſe to the great and extenſive Southern Ocean. Hence the northern parts of *Kamtſchatka*, that are ſheltered from the ſouth wind, are both more fertile and enjoy a better climate; and the nearer one comes to the *Lopatka* the moiſter and thicker is the air in ſummer, and the winds more violent and of longer duration in winter. It frequently happens, that about the Great River the weather is very calm and agreeable, while at the *Lopatka* the inhabitants cannot ſtir out of their huts; becauſe it is a narrow point of land, and expoſed to every wind, except in the bay. All along the *Penſchinſka* ſea, the more northernly any place lies, the leſs rain have they in ſummer and wind in winter. The winds and weather about the mouth of the *Kamtſchatka* river, and near to the upper *Oſtrog*, are very changeable. From the eaſt and ſouth-eaſt they have as violent ſtorms as about the *Penſchinſka* ſea; but yet, compared with this, the weather is more frequently fair than rainy. The difference between the eaſtern and weſtern parts of *Kamtſchatka* is plainly to be ſeen in travelling from the head of the *Biſtroy* river: for towards the *Penſchinſka* ſea the air appears always thick and hazy,

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 105

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

000 hours' time. It was the white of an egg, with ſome camphire and ſugar, which he rubbed 'till it foamed upon a pewter plate, then tied it in a handkerchief, and bound it upon the forehead. This he found to ſucceed in every inflammation of the eyes.

132 It hails frequently both in ſummer and harveſt; but I never ſaw the hail bigger than peaſe. It ſeldom lightens but at the ſummer ſolſtice. The thunder is alſo but ſeldom heard, and then ſeems to be at a great diſtance. We have no inſtance of any one killed by thunder: the natives ſay, indeed, that before the arrival of the *Ruſſians* they had a great thunder, and ſome were killed by it; but this is to be queſtioned, ſince for ſo long a time we have had no inſtances of it. As to fogs, it is impoſſible that there ſhould be greater any where than at *Kamtſchatka*; and it is to be queſtioned whether deeper ſnows fall any where between 55 and 52 degrees north latitude than here, from the melting of which the rivers ſwell ſo much as to overflow their banks, and the earth in the ſpring is entirely covered with water. The cold in winter is moſt intenſe about the Great River and the *Awatſcha*; but in the lower *Kamtſchatkoi Oſtrog* it is much warmer than in any other place of *Siberia* in the ſame latitude.

The greateſt inconveniency ariſes from the violent winds and ſtorms, concerning which the following remarks may not be improper. Before a great wind, which generally comes from the eaſt, the air is always thick and dark; but, as I had not a thermometer, I cannot be certain if it is warmer then than at other times. The eaſt winds coming from the *Lopatka*, where are burning mountains and warm ſprings, I imagine that they not only ariſe from the narrowneſs of the land, but alſo from ſubterraneous fires and vapours.

135 With regard to other advantages or diſadvantages of this country,
258 one may ſay in general, that its greateſt riches conſiſt in plenty
439 of good furs and fiſh, and its greateſt inconveniences in the want of iron and ſalt. The firſt they are ſupplied with from other

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other places, and the ſecond by boiling ſea water into ſalt; but 135
the troubleſome diſtant carriage of the iron, and the boiling of 258
the ſalt, are attended with ſuch expence and difficulty, that they 435
are both ſold at a moſt intolerable price. One cannot buy a 439
common ax under two rubles, and a pound of ſalt coſts four rubles.

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS. 133

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *.

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſhin, which contains 27 inches.

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133 After this, in *Awatscha* and the islands near the *Kurilskaya*
731 *Lopatka* they felt a terrible earthquake and motion of the waters, which was observed in the following manner. The earthquake began about three o'clock in the morning the 6th of *October*, 1737, and continued about a quarter of an hour, and many of the *Kamtschatkoi* huts and tents were overturned. At the same time the sea was driven upon the shore, and rose about 20 feet; immediately after all the water was carried back to a great distance from the shore, and then it returned again higher than before, and afterwards retired so far that one could not see it from the shore. At that time, in the passage between the first and second of the *Kurilski* islands, they observed clusters of rocks in the bottom of the sea that had never been seen before, although they formerly had great earthquakes and extraordinary agitations of the sea. A quarter of an hour after this the earthquake returned with most terrible waves, and the sea overflowed the shore 200 feet high, which, as formerly, immediately retired. This rolling motion continued for a long time, the sea frequently approaching the shore and departing from it. Before every earthquake a great, heavy, rumbling noise was heard from this overflowing of the sea. The inhabitants were all ruined, and many of them miserably lost their lives. In several places the meadows, little hills, and fields, were turned into salt-water lakes. This was not so violent upon the *Penschinska* sea as upon the Eastern Ocean; and the people about the Great River suffered very little.

At this time we sailed from *Ochotska* to the mouth of the Great River; and when we came on shore the 14th of *October*, the earthquake was still perceptible, which was sometimes so strong that we could not stand upon our feet; and this continued to the spring of the year 1738: however, it was more upon the *Kurilskaya Lopatka* and the coast of the Eastern Ocean than in those places that were more remote from the sea.

The

The Coſſacks of the great river, who were then upon the *Kuriſki* iſlands, told me, that upon the beginning of the earthquake they ran with the natives up to the tops of the mountains, and left all their goods, which were deſtroyed, as well as the habitations of the *Kuriles*. /133

The *Tulbatchinſky* mountain ſtands upon that neck of land which lies between the rivers *Kamtſchatka* and *Tulbatchik*: it has ſmoked for many years. In the beginning of the year 1739, for the firſt time, it threw out a ball of fire which ſet the woods on fire. After this fire-ball aroſe a thick cloud, which increaſing gradually at laſt fell down and covered the ſnow 50 verſts round with aſhes. I was going at this very time from the upper to the lower *Kamtſchatkoi* fort, and was obliged to wait a new fall of ſnow, as we could not travel upon this ſooty matter.

Nothing extraordinary happened upon this conflagration, except ſome ſmall ſhocks of an earthquake, which were felt both before and after. The great ſhock was about the middle of *December*, which I felt when I went to the upper *Kamtſchatkoi* fort from the Great River. We were then not far from the *Hrepta*, or *Ogulminſky* ridge. When we ſtopped about noon, the diſmal ſound in the woods that we heard at firſt ſeemed as an approaching ſtorm; but our kettles being thrown from the fire, and we ourſelves rocked in our ſledges, we were ſoon convinced of our miſtake. This earthquake had only three vibrations, which ſucceeded each other at about a minute's diſtance.

The mountain of *Kamtſchatka* is higher, not only than the two laſt mentioned, but than any other mountain in that part. Two thirds of its height are made up of rows of hills, as I mentioned, of the *Awachinſky*; the *Shatſe*, or top, making alone one third of its height. The circuit round the bottom of the mountain is near 300 verſts. The *Shatſe*, or top, is very ſteep on every ſide, and has ſeveral deep openings lengthways: the very ſummit turns

133 turns gradually broadeſt from the falling in of the earth into the mouth of the burning gulph. It is ſo high, that in a clear day it is to be ſeen from the upper *Kamtſchatkai* fort, which is about 300 verſts; and one cannot ſee other mountains, the *Tulbatchinſky* for inſtance, although they are much nearer. Before a ſtorm the ſummit appears ſurrounded with three girdles; the higheſt ſeems in breadth about the fourth part of the height of the mountain, from whence ariſes a continual thick ſmoke. The inhabitants ſay, that it throws out aſhes twice or thrice yearly, and ſometimes in ſuch quantities, that for 300 verſts around the earth is covered with them the depth of a verſhoke. From the year 1727 to 1731 the inhabitants obſerved that it burnt almoſt without interruption, but they were not under ſuch apprehenſions as in the laſt conflagration in the year 1737. This terrible conflagration begun the 25th of *September*, and laſted one week with ſuch violence, that to the people who were fiſhing at ſea near the mountain it appeared one red-hot rock, and the flames, which burſt through ſeveral openings, ſometimes ſhewed like rivers of fire with a ſhocking noiſe. Within the mountain were heard thunderings, crackling and blowing like the ſtrongeſt bellows, which ſhook all the neighbouring country: the nights were the moſt terrible. This conflagration ended as uſual, with throwing out a vaſt quantity of cinders and aſhes, of which however little fell upon the land, the whole cloud being almoſt carried by the wind to the ſea. It throws out porous ſtones and glaſs of different colours, which are frequently found in the brook *Boukoſſe*, which riſes out of this mountain. The 23d of *October* following at the lower *Kamtſchatkoi* fort happened ſuch a violent earthquake, that moſt of the houſes and ſtoves were thrown down, the bells of the churches rang, and the new church, which was built of thick balks of larch wood, was ſo much ſhaken that the joinings of the balks were all looſened. Some ſhocks were felt at times until the ſpring of the year 1738; however

however the agitation of the waters was leſs than what had been 133
formerly obſerved. The earthquakes are ſaid to be more violent near a mountain that burns, than near one that has left off burning, or is not quite kindled.

Beſides theſe mountains, I heard of two other gulphs where ſmoke ariſes: one is called *Joupanoſky*; the other, *Shevelitche*; but there are ſeveral places farther north than the river *Kamtſchatka*: ſome of which emit ſmoke, and ſome fire: and there are in the *Kurilſki* iſlands, one upon the *Paromuſir*, and another upon the *Alaide*; concerning which Mr. *Steller* obſerves, that it is only one hill which burns, not a whole ridge; all theſe mountains have outwardly the ſame appearance, and it is, therefore, probable that their contents are much the ſame; that from the external appearance, one may judge of their internal contents, and of their aptneſs to take fire and burn; and that in all theſe which have ſmoked or burned formerly, but have been extinguiſhed, lakes are always found; whence he concludes, that as theſe were burnt down to the bottom, the waters ruſhing through the opened paſſages, filled the empty ſpace; and hence an account may alſo be given of the cauſe of the hot ſprings.

There are two hills which have left off burning; the *Apalſky*, out of which riſes the river *Apala*; and the *Biloutchinſky*, from which comes the river *Biloutchik*. At the bottom of this 136
hill is a lake, where vaſt numbers of herrings are caught in the months of *March*, *April*, and *May*.

CHAP.

CHAP. III.

Of the HOT SPRINGS.

133 I Found the following hot ſprings: 1ſt, Upon the river *Oſernoi*, which runs out of the *Kurilſkoy* lake. 2d, Upon the river *Paudche*, which falls into the *Oſernoi*. 3d, Upon the river *Baano*, which is reckoned a branch of the Great River. 4th, Near the fort *Natchikute*. 5th, Near the mouth of the river *Shematchinſki*. 6th, Near the head of the ſame.

Theſe waters, which are upon the river *Oſernoi*, run in little ſprings from the ſouth bank; ſome fall directly into the river: others keep their courſe parallel to the river, and, joining after at ſome diſtance, fall together into the *Oſernoi*. Theſe ſprings are not conſiderable, nor very hot, only raiſing the thermometer (*Farenheit's*) which in the open air was at 45° to 145°.

The ſprings upon the *Paudche* are four verſts and a half diſtant from the firſt, and riſe out of the ground, upon the eaſt bank of the river in an open high hill which has a plain at the ſummit of 350 fathoms * in length, and 300 in breadth. This hill goes in a promontory towards the river, where it makes a a ſteep bank; but on the other ſide the deſcent is eaſy.

Several of theſe ſprings throw out their waters, like artificial water-works, about a foot, or a foot and a half, high, and with a great noiſe. Some of them ſtand in large pools like little lakes, and ſend out ſmall ſtreams, which, joining upon the plain, divide it, as it were, into ſo many iſlands, and at laſt fall in a conſiderable ſtream into the *Paudche*. That little lake marked by the letter ⌐ is remarkable for having an opening two fathoms deep.

* The *Ruſſian* fathom is ſeven feet.

In

In the iſland are a great many openings, ſome very ſmall, and others /33
above a foot diameter; but from theſe large openings iſſues no water, though the ſmall ones ſend out ſometimes water and ſometimes vapour with a very great force.

All thoſe places from which formerly iſſued out water, may be known by a various coloured clay which is found round them, for this clay is commonly thrown up by the waters. Sulphur is alſo found there, eſpecially about thoſe openings which emit vapours only.

Some ſprings likewiſe flow from that ſteep bank which we mentioned, two fathoms or more higher than the river. It is remarkable, that the ſtones of which this bank, and perhaps all the hill, is formed, are round, outwardly very dry, but within ſo ſoft that they may be rubbed between the fingers like clay: hence it has been conjectured, that the various coloured clay, which is found about the mouths of the ſprings, is nothing but theſe ſtones ſoftened by the moiſture and heat. The clay in taſte is ſour and aſtringent; and if a piece of it, or a ſtone, is broken, there appears an efflioreſcence of alum, like a moſs, with the colours blue, white, red, yellow, green, and black, which are ſo mixed as to reſemble marble; and when the clay is not quite dry, the colours are pretty bright.

Oppoſite to the promontory of the hill is an iſland in the river *Paudche*, where there are likewiſe ſprings of hot water, but ſmaller than thoſe before mentioned.

A more diſtinct idea may be had of theſe hot ſprings from the ſubjoined plan, in which each ſpring is marked with a particular letter, with the different degrees of heat.

133 *A* TABLE *of the different degrees of heat which were found in each spring, by* De l'Isle's *and* Farenheit's *thermometers.*

	De l'Isle's	*Farenheit's*
The lake at the head of the ſtream ⌈	80	116
The eye which is in the corner of that lake	65	134
The little lake into which the ſtream ⌈ falls	115	74
The ſpring out of which the ſtream 1 runs	50	152
The mouth of that ſtream where it falls into the lake —— —	106	87
The mouth of the ſtream E where it comes out of the lake —— —	95	98
The ſpring of the ſtream 2 —— —	20	188
The little lake at the head of the ſtream 3	60	140
In the ſame lake at the mouth of the ſtream 3 —— —— —	80	116
Where this ſtream joins the ſtream 2 —	93	108
At the head of the ſtream N —	10	200
The mouth of this ſtream —— —	55	146
The head of the ſtream K —— —	80	116
Where this ſtream joins the ſtream N	95	98
Where both theſe ſtreams fall into the *Paudche* —— — —	110	80

De l'Iſle's thermometer ſtood at this time, in the open air, at 136°, and that of *Farenheit's* at 49°.

The ſprings which are upon the river *Piaana* are not very different from thoſe of *Paudche*. They riſe upon both ſides of the river; and as upon the ſouth bank there is a high plain, and upon the north a cliff of rocks, the ſprings on the ſouth bank fall into the river in little ſtreams; but thoſe upon the north ſide run along the cliff, except one which riſes about 80 fathoms from the reſt, and where the cliff is more diſtant from the river, which has a courſe of 40 fathoms.

Amongſt

Amongſt the ſprings upon the ſouth bank it is to be remarked, /33 that one place is full of openings of very different diameters, where the water is thrown up two feet and a half with a great noiſe. The thermometer, which in the open air ſtood at 185 degrees, roſe to 15 degrees.

The ſprings of the Great River fall into it in one conſiderable ſtream, which runs between ſtony hills in a narrow channel. The banks are boggy, and the bottom ſtony, covered with moſs. From its ſpring to the place where it falls into the Great River is 261 fathoms. At the ſpring the mercury roſe in *De l' Iſle*'s thermometer to 23, and *Farenheit*'s to 185, degrees; thence to where it falls into the River it grew cooler gradually, ſo that at the mouth *De l' Iſle*'s thermometer only roſe to 115, and *Farenheit*'s to 74, degrees; in the open air the one ſtood at 175, and the other at 14, degrees.

The hot brook, that is near the river *Shematche*, and falls into the Eaſtern Ocean, is much larger than any of the above-mentioned. At its mouth it is three fathoms broad, and in ſome places near four feet deep, and its length is three verſts * and 88 fathoms. It runs between high ſtony hills with a ſtrong current: its bottom is a hard ſtone covered with green moſs, which in ſtill places ſwims upon the ſurface. Near the banks at its mouth, the heat is like that of ſummer water; and towards the head the graſs and plants upon the banks were green and ſome of them flowered in *March*. In going from this river to the laſt hot ſpring that lies upon the river *Shematche* one muſt paſs a great ridge of hills. Upon the eaſt ſide of this ridge, near the ſummit, is an even plain covered with round grey ſtones, without any plants growing upon it. Upon this plain in ſeveral places a vapour aſcends with great force, and a noiſe reſembling the

* A *Ruſſian* verſt is 500 fathoms, or 3500 feet.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 bubbling of water is heard. Here I dug, expecting to find water; but I found a ſtratum of ſuch hard ſtone that we could not dig through it. It is probable that the waters of the warm brook, that falls into the Eaſtern Ocean, have their origin from this place, for it is directly oppoſite to the riſe of that brook: and the laſt ſtream that falls into the river *Shematche* is likewiſe thought to derive its ſource from the ſame place, as it riſes from this ridge, upon the weſt ſide, in a deep hollow, ſurrounded with ſmoking hills. The very bottom itſelf is full of boiling ſprings for near a verſt and a half; all which join at laſt in one ſtream.

In this bottom are two large wells, that deſerve particular notice; one is five, the other three fathoms' diameter; the firſt one and a half, the other one fathom deep. In theſe the water boils up with white bubbles, and makes ſuch a noiſe, that one perſon cannot hear another in the common way of ſpeaking; nay, ſcarcely when he cries aloud. The vapour is ſo thick, that one cannot ſee a man at ſeven fathoms' diſtance; and the boiling of the water is only to be obſerved by lying down upon the ground. The earth between theſe wells yields like a bog, ſo that one is in continual fear of ſinking in. The water of theſe ſprings is diſtinguiſhed from all others by a black matter, like *Chineſe* ink, that ſwims upon the top, which ſticks ſo to the fingers that one cannot without difficulty waſh it off. They have, in common with other hot ſprings, clay, lime, alum, and ſulphur, of various colours. In all the above-mentioned ſprings the water is thick, and ſtinks like rotten eggs.

823 The *Kamtſchadales* eſteem all the burning mountains, and
778 places where hot ſprings ariſe, as the habitations of ſpirits, and approach them with fear; but, as the latter are the moſt dangerous, they are under the greateſt awe of them; and therefore they never willingly diſcover them to any *Ruſſian*, leſt they ſhould be obliged to accompany him near them. It was by chance that I heard of them after I had travelled 100 verſts from the

the place; but this natural phænomenon appeared ſo curious that 778
I returned to examine it. The people of *Shematchinſki* village 823
were obliged to declare the true reaſon why they had not formerly diſcovered them, and much againſt their will were forced to ſhew me the place, but would not go near it: and when they ſaw that we lay in the water, drank it, and eat things boiled with it, they expected to ſee us periſh immediately; but when they ſaw this did not happen, they told it in the village as an uncommon wonder, and were aſſured that we muſt be very extraordinary people ſince even the devils could not hurt us.

This is remarkable, that north from the mouth of the river 133
Kamtſchatka, and weſt along the coaſt of the river *Oſernoi*, there are no hot ſprings, although it abounds in *Pyrites*, ſulphur, iron ore, and ſtones that yield alum and vitriol. Mr. *Steller* obſerves, that the appearance of the country of *Kamtſchatka*, and the frequent earthquakes there, give reaſon to think that it is full of caverns replete with combuſtible matter, which taking fire in the bowels of the earth produces earthquakes, and makes thoſe vaſt alterations of which we ſee numerous inſtances in rocky ſhores being torn off both upon the *Beaver* ſea, and in the iſlands which lie between *Aſia* and *America*. The combuſtible matter, he tells us, is kindled by the ruſhing of the ſalt water into thoſe ſubterraneous caverns, through their apertures towards the ſea; which hypotheſis is ſtrengthened by his obſervation that the earthquakes are moſt frequent about the equinoxes, when the waves of the ſea are driven by the great ſtorms with uncommon violence upon the ſhores; and eſpecially about the ſpring equinox, at which time the water always riſes higher than at any other: and the inhabitants of *Kamtſchatka* 823
and the *Kuriles* know this ſo well, that they always fear the beginning of *March* and the end of *September*.

It is very extraordinary, that no iron has been diſcovered here, 135
although ſome ore is obſerved mixed with clay and earth, to which

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 which ſulphur being added the ſubterraneous fires may eaſily be
135 accounted for; nor do we yet know of any ſalt ſprings, although the narrowneſs of the iſthmus of the peninſula of *Kamtſchatka*, and ſo many ſubterraneous caverns under the rocky hills which have communication with the ſea, ſhould give us reaſon to conclude that there muſt be ſome.

After the hot ſprings we ought to take notice of the rivers which never freeze. Theſe are ſo common in *Kamtſchatka*, that there is ſcarcely one river which has not ſome very large openings, even in the moſt ſevere froſts; and the plains under the hills are ſo full of ſprings that one cannot go dry any where in the ſummer. Theſe ſprings, which joining make a little rivulet, and fall into the *Kleutchova Kamtſchatka*, never freeze, and yield fiſh almoſt the whole winter, which gives an advantage to the *Kleutchova*, as it furniſhes not only the *Kamtſchadales*, but all the people of the *Oſtrog* of *Niſhniſhantalſky*, with freſh fiſh, which is generally eſteemed, on account of its ſcarcity at that time, as a very great delicacy. This may alſo account for the wholeſomeneſs of all theſe waters, which the inhabitants drink after eating the fatteſt fiſh without the leaſt harm, although, in other places, cold water drunk upon fat fiſh produces the bloody flux.

CHAP.

CHAP. IV.

Of the METALS *and* MINERALS.

135

ALTHOUGH the peninſula of *Kamtſchatka* is hilly, and the ground ſuch as might naturally be ſuppoſed to produce metals and minerals, eſpecially iron and copper, with which *Siberia* abounds; yet hitherto little has been diſcovered. This is no proof that ſuch ores are not in *Kamtſchatka*; for, beſides that the *Kamtſchadales* are entirely unexperienced, the *Ruſſians* who live here have as yet given themſelves no trouble in the ſearch after metals; as they have ſuch large quantities of iron and copper inſtruments brought to them, that they have not only ſufficient for themſelves, but are alſo enabled to furniſh the *Kamtſchadales* and *Kuriles* with them at a very conſiderable profit. It is alſo to be conſidered, that the providing for their ſubſiſtance takes up ſo much of their time, that they can ſpare but little for any thing elſe; and moreover, the places proper for ſuch tryals are very difficult of acceſs: to which it may be added, that the frequent ſtorms and general inclemency of the weather are great hindrances to ſuch tryals; eſpecially when every neceſſary for the undertaking muſt be carried upon men's backs, for in the ſummer they can carry nothing upon dogs. It is reaſonable to preſume that ore might be found in *Kamtſchatka*, if it was worth while to ſearch for it. Copper ore has been found about the *Kurilſkoy* lake, and the *Ivovoy* bay; and a ſandy iron ore upon the banks of the ſeveral lakes and rivers; whence it is expected that there is iron ore in the hills from which theſe lakes and rivers riſe. Native ſulphur is gathered about the rivers *Kambalinſkoy* and *Oſernoi*, and the *Kronotzkoy* cape. The ſulphur

316 439 135 316 135

135 phur which they bring from *Olontoſki*, where it drops from the rocks, is quite fine and pellucid; and in the *Pyrites* upon the coaſt it is to be found every where.

The following kinds of earth are common. Great quantities of white chalk are found about the *Kurilſky* lake; tripoly and oker about the Great River, and the villages of *Nachikin* and *Koutchinubiff*; and a purple-coloured earth about the hot ſprings, 135 and ſometimes a hard ſtony oker. Among the ſtones in the 324 mountains are found, but rarely, ſmall cherry-coloured chryſtals; and near the river *Charious* are found pieces of fluſſe, which is like a coarſe green glaſs, of which the inhabitants formerly made knives, axes, lancets, and darts. It is called by the *Ruſſian* natives glaſs, and by the *Kamtſchadales*, *nanagy*. This fluſſe is alſo found in the copper mines about *Ecatherinenbourg*, where it is called a topaz. There is likewiſe here a ſort of light ſtone, white like chalk, of which the inhabitants make plates, and lamps wherein they burn their fiſh oil; and every where upon the ſhore is found an iron-coloured hard ſtone, porous as a ſpunge, and eaſily turned by the fire.

The inhabitants find pellucid ſtones near the ſprings of the river, which they uſe inſtead of flints. Some of theſe ſtones are ſemi-pellucid, whitiſh and milky, and reckoned cornelians by the *Ruſſians*. Some ſmall pellucid ſtones of a yellowiſh colour, like corals, are found upon the banks of ſeveral rivers; and plenty of hyacinths near *Tomſkoy*.

135 Hitherto they have diſcovered no precious ſtones here. The hills 278 are firmer than thoſe in *Siberia*, and do not fall away like them; but when the earth falls off they find much *lac lunæ*; and a ſoft kind of bolus, of a fattiſh creamy taſte, is found near the *Penſchinſka* ſea, *Kurilſkoy* lake, and the *Olutorſkoy*: this is uſed as an excellent remedy in fluxes. I ſent ſpecimens of 135 moſt of the above things to the Muſeum of the Imperial Academy of *St. Peterſbourg*. I muſt not forget to mention that

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

The birches of

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough ‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthus fructu rubro et nigro.
** Sorbus.

the

the commanding officer that the kettle with ſlantza and cedar tops 137
ſhould never be taken from the fire. Red currants, raſberries, 262
and kneſhnitza are very rare there, or grow at ſuch a diſtance 273
from their houſes that no one cares to go in ſearch of them. 222
The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is 386
no bad remedy for the ſcurvy; and the inhabitants dye any old 314
cloaths with it that have loſt a in colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves 222
with roots and herbs, and make them ſupply not only their 262
want of bread, but of fiſh alſo. The principal of theſe 137
is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It 137
grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-n[illegible] [illegible]y† them in the ſun, and
435 ſell them for five or ſix rubles the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Harioufkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry."

which

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matifta fladka trava *, or the 824
ſweet plant, is as uſeful in their oeconomy as the ſaranne; 263
for the *Kamtſchadales* uſe this not only as a confection in tarts 273
and broths, but in all their ſuperſtitious ceremonies this is abſo- 177
lutely neceſſary. The *Ruſſians* were no ſooner ſettled there, than they found that brandy was to be diſtilled from it; and at preſent this is the only brandy that is publickly ſold. The root of this herb is without yellowiſh, within, white; and of a bitter, ſpicy taſte. The ſtem is fleſhy, of three or four 137
joints, and about a man's height. Its flower is a reddiſh green, with ſhort white hairs, longeſt near the root. The leaves upon the ſtem neareſt the root are five or ſix, and ſometimes even ten: they grow upon thick, round, fleſhy, green, rough ſtalks, marked with little red ſpots. Upon the main ſtem, at every joint, ariſes one ſuch leaf, but without a ſtalk. The flowers are ſmall and white, like fennel, or other herbs of that ſort; and conſiſt of five leaves, of which the innermoſt are largeſt, and the outward ſmalleſt. It has two ovaria upon every flower, upon ſhort ſmall necks; and round them are five white ſtamina with green points, which riſe higher than the flower. The flowers, taken all together, reſemble a plate; while the ſtalks which ſupport the umbella are longeſt without, and in the middle ſhorteſt: ſtalks ariſe from every joint, upon which are flowers.

This plant abounds every where in *Kamtſchatka*, and the inha- 222
bitants gather and prepare it in this manner: they cut off the 252
ſtalks of the leaves which grow neareſt the root, and with a ſhell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

ſcrape

222 ſcrape off the ſkin; and then bind up ten ſtalks together.
252 When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 The women, when they gather this,[1] muſt wear gloves; for the
222 juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 The manner of diſtilling ſpirits from it is as follows:---
556 They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff]

is only the richer ſort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 556
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 757
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. LINN. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliis pinnatifidis Linn. Cliff.

boil

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

ſhew itſelf under the ſnow: and I have heard an extraordinary 757
account of its virtues from the Coſſacks that were employed with captain *Spanberg* in building the ſloop Gabriel: they were ſo ill with the ſcurvy, that ſcarce any were able to work, or even to walk, ſo long as the ground was covered with ſnow; but as ſoon as the high lands began to appear green, and the wild garlick to ſprout out, the Coſſacks fed upon it greedily. Upon their firſt eating it, they were covered over with ſcabs in ſuch a manner, that the captain believed they were all infected with the venereal diſeaſe. In about a fortnight, theſe ſcabs fell off, and they were perfectly recovered of the ſcurvy.

We muſt reckon amongſt the food of the *Kamtſchadales* the /137
ſhelmina *, and the morkovai †, which is the ſtalk of a plant 262
that is hollow and juicy, ſuch as the angelica. The ſhelmina is a ſpecies of the ulmaria. Its root is blackiſh without, and white within: it ſends out from one root two or three ſtalks about a man's height; which, near the root, are about a finger thick, but above, ſomewhat thinner. The leaves ſhoot out from long branches which grow all over the ſtalk. Their upper part is green and ſmooth; and their lower rough, with high reddiſh veins. Where the branch ſprings from the root there are two leaves like thoſe above deſcribed, but ſomewhat leſs. The ſtalk is triangular, reddiſh, hard, and rough. At the top of the plant is a flower reſembling that of the ſervice-tree. It has four oval piſtils, flattened in the ſides, with downy edges; in each of which are contained two longiſh ſeeds. They are ſurrounded by ten white ſtamina, riſing above the flower; the anthera being likewiſe white. It flowers about the middle of *July*, and the ſeeds are ripe about the middle of *Auguſt*. The root, ſtalks, and

* Ulmaria fructibus hiſpidis. STELLER. † Chærophyllum ſeminibus levibus nitidis, petiolis ramiferis ſimplicibus. LINN. Cliff. p. 101.

137 leaves of this plant are very aſtringent: both the *Ruſſians* and
252 *Kamtſchadales* eat it in the ſpring. They preſerve the root[1] for
262 winter, which they ſtamp and boil for a gruel. It has ſome reſemblance in taſte to the Piſtacho nut.

The morkovai pouſhki, or carrot bunches, are ſo called becauſe they are like carrots in their leaf as well as in taſte. They likewiſe eat this green in the ſpring, but they oftener ſour it like ſour crout, or make a liquor with it.

137 The kotkonia * grows upon the banks of the rivers of *Kamtſchatka* in great plenty. Its root is about the thickneſs of one's finger, bitter and aſtringent, black without, and white within. Sometimes five, but always more than two ſtalks ariſe from this root, about ten inches high, of the thickneſs of a gooſe-quill, and of a yellowiſh-green colour. At the top are three oval leaves ſpread like a ſtar, from the middle of which riſes a ſtalk half an inch high, which ſupports the flower. The cup of the flower conſiſts of three oblong green leaves, and the flower itſelf of as many white ones. In the middle of the flower is the piſtil, of ſix ſides, a yellow colour, with a red top: it contains three cells, and is ſurrounded with ſix equal yellow-coloured ſtamina; the anthera is alſo yellow. When the piſtil is ripe it is as big as a walnut, is ſoft, fleſhy, and of an agreeable taſte, like a pleaſant apple. It flowers about
262 the middle of *May*. The *Kamtſchadales* eat the root of this plant both freſh and dried, with caviar; but the fruit muſt be eaten as ſoon as gathered, for it is ſo delicate that it ſpoils if it be kept one night.

137 The ikoume ‡, or biſtort, grows in plenty both on the hills and
262 in the vallies. The *Kamtſchadales* eat it freſh or dried, and

* Tradeſcantia fructu molli eduli.

‡ Biſtorta foliis ovatis oblongis acuminatis. LINN. Cliff.

1. [Shelmina, Ulmaria fructibus hispidis. pounded Steller]

pounded with caviar. It is far from being ſo aſtringent as that in *Europe*, is juicy, and taſtes like a nut. 137 262

Utchichlcy † is a plant that has leaves like hemp, but flowers like the ragwort. When the leaves are dried, and boiled with fiſh, they make the broth taſte as if the fleſh of the wild goat was boiled in it.

The root called here mitoui, and at *Jakutſki* ſardan, they fry in the fat of fiſh, or ſeals, and eſteem it a delicate diſh.

Theſe are the principal plants which they make uſe of in 262 their kitchens; however there is a great number of others, and 824 alſo of plants thrown out by the ſea, which the *Kamtſchadales* eat both freſh and dry in the winter: for, as Mr. *Steller* obſerves, they refuſe nothing, but eat every thing they can get down, even the drieſt plants and naſtieſt rotten muſhroons, although one would imagine the conſequence dangerous, as indeed it ſometimes happens. However, he tells us the natives have obtained ſuch a knowledge of plants, and of their uſe both in food and medicine, that he is ſurpriſed; and that one ſhall not find ſo much knowledge of this ſort among any barbarous nation, nor even, perhaps, amongſt the moſt civilized. They give a name to every one of their plants, and know all their properties, and the different degrees of virtue which they derive from the various ſoils and expoſitions in which they grow; and ſo accurate are they in theſe diſtinctions, and alſo in the proper time of gathering the ſeveral fruits and other produce, that it is truly wonderful. Hence the *Kamtſchadales* have this advantage above other people, that they can find food and medicine every where; and, by their knowledge and experience, are in little danger from the noxious plants.

† Jacobea foliis cannabis. STELLER.

137 Amongst the medicinal plants we must mention the fol-
278 lowing: 1st, Kailoun, a plant which grows in all the swamps near the rivers. The inhabitants use this as a cataplasm in all boils to make them suppurate; and taken in decoctions, they imagine it produces sweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtschatka*, they use in decoctions for all pains and swellings of the legs. 3dly, Katunatch †, or wild rosemary, is not so strong as in other parts. The inhabitants have thought it beneficial in the venereal disease, but in this are deceived. 4thly, The sea oak ‖ is thrown out by the waves; and being boiled with the sweet herb, a decoction of it is given in fluxes. 5thly, The sea rasberry is given to women in labour, to promote the birth. 6thly, There is yet another sea plant, called yachanga ‡, which the sea throws out near to the *Kurilskaya Lopatka*, resembling the whale's beard. This the inhabitants use in cholic pains, infusing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almost all the shore of
757 *Kamtschatka*. This plant is made use of against pains in the back in the following manner:---They put the patient into a hut made exceedingly warm; and when he begins to sweat profusely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occasion sudden death: however from this practice they
137 generally obtain great relief. 8thly, The zgate †† must not
278 be omitted, whose dreadful qualities are but too well known
411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is squeezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venosis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

 They also

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

CHAP. VI.

Of the LAND ANIMALS.

136

THE principal riches of *Kamtſchatka* conſiſt in the great number of wild beaſts: among which are foxes, ſables, ſtone foxes, hares, marmottas, ermins, weaſels, wolves, rein-deer wild and tame, and ſtone rams. Their fox ſkins in the thickneſs, length, and beauty of their hair equal, if not excel, all the foxes of *Siberia*; beſides there are in *Kamtſchatka* almoſt all the different ſpecies of foxes which are to be found in other places, ſuch as the red, fiery, blue-breaſted, or marked with a black croſs, the cheſnut, black cheſnut, and the like; and ſometimes white foxes are found there, but theſe very ſeldom. It is remarkable, that the more valuable 224
foxes are the moſt cunning; ſuch are the black cheſnut, the 177
blue-breaſted, and the fiery coloured; ſo that not only the *Kamtſchadales*, but even the *Ruſſians* find it difficult to catch them. It happened while I was at *Kamtſchatka*, that the Coſſacks tried for two winters to catch one black fox which frequented the Great River, without being able to effect it. The moſt uſual method of taking them is either by poiſon, traps, or bows. The poiſon is thrown in lumps in the freſh tracts; the traps are ſet upon the ſides of hills, baited with a live animal; and for the greater ſecurity two or three of the traps are placed upon one hillock, that whatever way the foxes approach they may fall into one of them; and this is found neceſſary, for thoſe, which have been once in danger from the ſtroke of this trap, proceed afterwards ſo cautiouſly, that they eat the bait without being ſeiſed; but, with all their cunning, it is difficult for them to eſcape the

ſeveral

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 ſeveral traps, which ſeize them ſometimes by the head, and ſome-
177 times by the foot. The method of killing them with the bow is thus: the hunters muſt know exactly how high to place it; when the bow is bent, it is faſtened to a ſtake driven into the earth near which the fox's tract is obſerved, and then a cord drawn from the bow-ſtring, is ſtretched very tight over his ordinary path; and ſo ſoon as this cord is touched with the foot of the fox, the bow is diſcharged, and the arrow pierces the very heart. Theſe are the inventions of the *Ruſſian* Coſſacks; for formerly the *Kamtſchadales* gave themſelves no trouble about the foxes, not valuing their furrs much more than dogs' ſkins. They pretend they could have killed as many as they wanted with ſticks, and that foxes were formerly ſo numerous in *Kamtſchatka*, that when they fed their dogs, they were obliged to
136 drive them away from the trough: and though this may ſeem
224 improbable, yet it is certain, that even now they are in great plenty near the forts, which at night they enter without any ſeeming apprehenſion of danger from the dogs of the country, which either cannot catch them, or, not being bred to it, do not mind them. It happened when I was there, that one of the inhabitants catched ſeveral of them in the pit where they keep their fiſh. The beſt time to hunt foxes is, when the earth is hard frozen, before the ſnow falls, as it is then difficult for them to dig out the rats' neſts, which they do when the earth is thawed, the rats
224 being their chief ſupport. The *Kuriles*, who live upon the
286 *Lopatka*, catch foxes in a manner peculiar to themſelves. They have a net made of the hair of whales' beards, compoſed of ſeveral rings; this is ſpread upon the ground, and to a ring in the middle they bind a magpye; round the net is drawn a cord, the ends of which are held by a perſon concealed in a pit near at hand, who, when the fox ſprings upon the bird, draws the cord and gathers together the net, which ſurrounds the fox as the drag net does a fiſh.

The

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, 136
both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other.

Before the conqueſt of *Kamtſchatka* there was ſo great a 224
plenty of ſables that one hunter would kill ſeventy or eighty 651
in a year; and that not for the ſake of the furr, but the fleſh, 435
which they eſteem very delicious. The inhabitants at that time 136
willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in 224
hunting as thoſe about the *Lena*, they could ſell a great many 461
more than they; but ſuch is their natural lazineſs, that they 426
never kill more than what they muſt pay in tribute, and what 185
will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of

 their

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
185 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look at, and whiſtle ſurpriſingly loud. No body thinks 1his while to hunt ermines *, weaſels †, or common marmottas ‡, unleſs by chance they meet with them; ſo that one cannot reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka* dreſs their hair with the white paws of this animal, and reckon them a very great ornament. However, the *Kamtſchadales* kill ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly beings wear no other garments than of this furr; nor can they make their wives or miſtreſſes a greater preſent than of one of theſe ſkins, which was formerly ſold for thirty, and even ſixty rubles; and for the two paws which the women wear in their hair, they ſometimes give one, and ſometimes two ſea beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. GMEL.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. LINN.

1 [Original torn. Probably "it worth"

136 rity in killing of deer, which they practiſe in this manner :—They climb up ſome tree, carrying with them a parcel of ſuch moſs as the deer uſe to eat. This they let fall from the tree, and if the deer [1]eat it, they throw themſelves down upon his back; then faſtening themſelves between the horns, they tear out his eyes, and give him ſo much pain, that the miſerable animal, to put an end to his torment, or if poſſible to free himſelf from the cauſe of it by deſtroying his enemy, ſtrikes his head againſt the trees, which generally kills him. No ſooner is he brought down than the glutton divides his fleſh carefully, and hides it in the earth, to ſave it from being ſeized by any other creature; and never eats a bellyful before he has done this. In the ſame manner, upon the river *Lena*, they deſtroy horſes. They are eaſily tamed, and are capable of learning ſeveral tricks. It has been ſaid, but we never heard it aſcertained, that they carry their gluttony to ſuch a degree as to be obliged to relieve themſelves by ſqueezing their over-ſwoln bodies between two trees to unburthen their bellies of the inſufferable load. Thoſe that are tamed are not ſo voracious; but perhaps theſe animals are not alike in all countries.

Bears and wolves are ſo numerous here, that they fill the woods and fields like cattle; the bears in ſummer, and the
136 wolves in winter. The bears of *Kamtſchatka* are neither large
752 nor fierce, and never fall upon people, unleſs they find them aſleep; and then they ſeldom kill any one outright, but moſt commonly tear the ſcalp from the back part of the head; and, when fiercer than ordinary, tear off ſome of the fleſhy parts, but never eat them. The people who have been thus wounded, are called *Dranki*, and are frequently to be met with. It is remarked here, that the bears never hurt women; but, in the ſummer, go about with them like tame animals, „eſpecially

1. [Original torn. Probably "Comes to.

eſpecially when they gather berries. Sometimes, indeed, the 136
bears eat up the berries which the women have gathered, and 752
this is the only injury they do them.

In the ſeaſon, when the fiſh enter the mouths of the rivers 136
in vaſt ſhoals, great numbers of bears come down from the hills, and ſettle in proper places for catching them; which they do in ſuch plenty, that they only eat and ſuck the bones of the heads, neglecting the bodies; but when this plenty is paſt, they are glad to gnaw the bones which they formerly deſpiſed. They frequently ſteal fiſh from the fiſhing huts of the Coſſacks, although there is always a woman left to watch them. To her indeed they never do any hurt, ſatisfying themſelves with what fiſh they can find.

Before the introduction of fire-arms, they uſed ſeveral de- 224
vices for killing the bears. Cutting ſeveral billets of wood, they ſtop up the mouth of the den with them, which the bear draws in that his paſſage may not be ſhut up. This they continue until he is ſo ſtraitened in his den that he cannot turn himſelf; then they dig down from above, and kill him with their ſpears. The *Koreki*, in order to catch the bears, ſeek out ſome tree that is crooked above, upon which they faſten a ſnare, and behind it place ſome proper bait; which the bear endeavouring to ſeize is held faſt by the head or the paw. They place heavy logs of wood, in ſuch a manner, that they will fall with the leaſt touch and cruſh them. Another method is to lay a board driven full of iron hooks in the bear's tract, and near to that they place ſomething that eaſily falls down; this frightening the bear by its fall, he runs upon the board with greater force; and finding firſt one fore paw wounded and ſeized by the hooks, he endeavours to free himſelf by beating the board with the other; thus both being fixed, he reſts on his hinder legs, which cauſes the board to riſe before his

eyes,

224 eyes, and perplexes him in ſuch a manner that he falls in a fury and beats himſelf to death. The people about the rivers *Lena* and *Ilime* have ſtill a more odd way of catching them. They place a nooſe upon the bear's tract or entrance to his den, faſtened at the end to a large log of wood; when the bear finds himſelf entangled, and that the log hinders his walking eaſily, he takes it up, and carrying it to ſome precipice, he throws it down with great force, which dragging him after it bruiſes him very much: however, he continues this 'till in the end he kills himſelf. This laſt method is ſomewhat like that which the *Ruſſians* uſe to preſerve their honey from the bears. They hang ſuch a log at the end of a long ſtring upon thoſe trees where the bees are hived; and when the bear, climbing up to get at the hive, finds himſelf interrupted by the log, he ſhoves it away; but returning it ſtrikes him again, and obliges him to toſs it with greater force, which makes it revert with ſtill greater upon himſelf. He continues this ſport ſometimes until he is killed, or falls from the tree.

The making bears drunk and killing them, or hunting them with proper dogs, is ſo common that I have no occaſion to ſay more about it.

One method is yet to be mentioned, which I have heard from people of reputation; namely that one man will kill ſuch bears as a whole company would be afraid to attack, and that without any other inſtrument than a ſtilletto, ſharp pointed at both ends, faſtened to a thong. The thong he wraps about his right arm up to the elbow; and taking the ſtilletto in this hand, and the knife in his left, he advances upon the bear, who, as uſual, ſtanding upon his hinder legs, and opening his mouth, attacks the hunter: but he, with great reſolution and addreſs, thruſts his hand into his throat; and placing there the ſtilletto, not only prevents him from ſhutting his mouth, but alſo gives him ſuch exquiſite

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 wolves are very ſeldom ſeen here, and therefore they are much
262 more eſteemed than the grey. Although the *Kamtſchadales*
237 are called univerſal eaters, yet they never eat the fleſh of either wolves or foxes. The deer and ſtone rams may be reckoned among the moſt uſeful of all the animals in *Kamtſchatka*, becauſe their ſkins are moſt uſed in cloathing. The inhabitants, however, kill but few in proportion to the great numbers that are in
136 this country. The deer live in moſſy places, and the wild rams
224 upon the higheſt mountains; ſo that the hunters of the wild rams
237 leave their dwellings in the beginning of harveſt, and taking all their families with them go to the hills, where they are employed in this chaſe until the month of *December*. The wild rams reſemble goats, but their hair is like the deers'. They have two horns that are twiſted round like the *Ordinſky* rams, but much larger. The horns of thoſe that are of full age weigh each of them from 25 to 30 pounds. They run very ſwiftly, throwing their horns back upon their ſhoulders; ſpring over rocks, and run upon the narrow ledges of the moſt dangerous precipices. Cloaths made of their ſkins are very warm. The fat upon their haunches is equal to that of the deer, and the fleſh is a moſt delicious food. Of the horns they make ladles, ſpoons, and other ſmall utenſils; and the horn entire they carry upon the road at their girdles, and uſe it for a bottle.

136 There are three kinds of rats; the firſt of which is of a brown colour, as large as the greateſt houſe-rats in *Europe*: but their cry is very different, reſembling the ſqueaking of pigs; otherwiſe they are very like our common rats. Of the ſecond kind there are but few, and theſe in the houſes, where they run about without fear, and live upon any offals. The third ſort have a diſpoſition ſomewhat like the drones among bees, laying up no manner of proviſion, but ſtealing their food from the firſt kind, which live in the fields, woods, and high mountains, in great numbers.

numbers. The tegulchitch, or first kind, have nests very 136
roomy, neat, and spread with grass, divided into different apartments; in some of which they lay up the saranne quite clean, in others rough; in others, again, several sorts of roots, which they gather in summer with great labour, and lay up against winter. In dry sunny days they drag these out of their nests, and dry them. During the summer they live upon berries, and what else they can find proper for their food; never touching their winter provision so long as they can find any food in the fields. Among the several things found in their nests, I observed the saranne, the anacampserus, bistort, goats-beard, burnet, and cedar nuts.

These rats change their habitations like the wandering tartars, 136
and sometimes for a certain number of years they all leave 825
Kamtschatka, and go to some other place. This retirement is 787
very alarming to the *Kamtschadales*, who think it forebodes a rainy season and a bad year for the chace: but when these creatures return, they confidently expect a fine one and good hunting; so that, as soon as they begin to re-appear, expresses are sent to all parts to carry the good news. They always take their departure in the spring, first gathering together in vast numbers. They direct their course due west, crossing rivers, lakes, and even arms of the sea; and when, after long swimming, they reach the shore, they lie upon the banks, as if they were dead, 'till at length they recover their strength, and then set out again upon their march. Their greatest danger in the water is lest some ravenous fish should swallow them up: but upon the land they have nothing to fear; and the *Kamtschadales*, who are so greatly interested in their preservation, when they find them weak upon the banks of the rivers or lakes, they give them any assistance in their power. From the river *Penzin* 136
they go southward, and about the middle of *July* they generally reach *Ochotska* and *Judoma*. Sometimes their troop is so nu-

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136 merous that travellers muſt wait two hours before they paſs. They return commonly to *Kamtſchatka* about the month of *October*. It is ſurpriſing that ſuch ſmall animals, in one ſummer, can paſs over ſuch an immenſe tract of land; and one cannot but admire the order and regularity which they obſerve in their march, as well as the foreknowledge they have of the change of weather.

825 Some of the inhabitants aſſured me, that when they go out of their neſts they cover their proviſions with poiſonous herbs, to deſtroy other rats that may come to rob their ſtore; and that, if all their winter proviſion is taken away, and nothing left that they can eat, in the ſtead of their own ſtores, they ſtrangle themſelves for vexation, ſqueezing their necks between the forked branches of ſhrubs: for which reaſon the *Kamtſchadales* never take away all their ſtore, and even pay for what they take by putting in either dried caviar, or ſomething that will ſerve the poor creatures for ſuſtenance. Although all theſe circumſtances are related by the moſt ſerious of the *Kamtſchadales*, yet we muſt not implicitly rely on their authority, before the facts are better enquired into.

231 The dogs of *Kamtſchatka* are extreamly like the common village dogs, and are white, black, ſpotted white and black, or grey like the wolves; brown or other colours being very rare. They are eſteemed ſwifter and longer-lived than any other dogs; and this may be attributed to their light ſimple food, which is fiſh. In the ſpring, every one lets his dogs run at liberty, without taking any care about them; for they can be uſed for travelling only while the ſnow is on the ground. They then feed upon what they can get in the fields, where they dig for the mice; and in the rivers they, as well as the bears, catch fiſh. In the month of *October* the *Kamtſchadales* call them home, and tie them up near their huts, 'till they loſe a good deal of their fat, that they may be lighter for the road, and then one hears

hears their continual howling night and day. In the winter 231
they are fed with opana and fish-bones, which are laid up for them in summer. The opana is thus prepared :—As much water as they think their dogs want they pour into a large trough, and then throw in some ladlefuls of sour or rather rotten fish, which is prepared in pits for this purpose, adding to this some fish-bones, and heating the whole with glowing stones until the fish and bones be boiled. This opana is reckoned the best and most agreeable food for the dogs, and they feed them with it only at night, which makes them sleep well; but never give them any in the day when they design to travel, because it would make them heavy and lazy: though they be never so hungry they will not touch bread; but rather than that, eat their own bridles, reins, or harness, if they can get at them. How- 231
ever fond they may be of their master, yet, if he happens to 492
fall out of his sledge, and lose his hold of it, they run away without regarding him; and he must walk on foot until the sledge be overturned, or catched and stopped by something or other; and therefore he ought to be careful never to lose his hold, but rather submit to be dragged upon his belly until the dogs tire. Besides, upon any steep descent, especially the banks of rivers, one half of them must be unyoked, otherwise they are not to be managed; for those that appear quite tired shew an uncommon vigour in such places, and the more dangerous the descent is the more strength they exert. They are in like manner unruly if they find the scent of the deer, or hear the howling of other dogs in the villages near at hand. But for all this, the dogs are, and always will be, absolutely necessary in *Kamtschatka*, even although there should be plenty of horses; for they could seldom be used in winter on account of the great depth of snow, and the frequency of hills and rivers; and in summer, the bogs are so frequent, that some places are impassable even for men. Besides dogs have this advantage over horses; that

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231 in the greateſt ſtorm, when a man cannot ſee the path, nor even
492 keep his eyes open, they very ſeldom miſs their way; and if
825 they ſhould, they go from one ſide to the other, 'till by the
237 ſmell they find it again: and when it is abſolutely impoſſible to
787 travel at all, which often happens, then the dogs lying round their maſter defend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231 Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

CHAP.

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CHAP. VII.

Of the VITIMSKY SABLES, *and the Method of hunting them.* 000

ALTHOUGH the ſable-hunting of *Vitimſky* does not properly belong to the deſcription of *Kamtſchatka*, yet as in treating of the latter we have had occaſion to mention the ſable, I thought it might not be amiſs to give an account of the various methods of this chace in different places. The *Kamtſchadales* do not ſtir out for a fortnight or more after 224
a piece of ill-luck, or having hunted one day without game; 777
but the *Vitimſky* hunters ſpend almoſt the whole year in continual toil, and are very happy, if, in that time, they catch ten ſables for each man in company. It is true indeed, that ten com- 000
mon *Vitimſky* ſables are equal to forty of *Kamtſchatka:* but, notwithſtanding, if the inhabitants of *Kamtſchatka* would take the ſame pains as thoſe of *Vitimſky*, they might exceed them in the profits of hunting; for ſables are as numerous in *Kamtſchatka* as ſquirrels are upon the river *Lena*. The *Vitimſky* hunting is the more remarkable for being ſubject to many rigorous laws and ſuperſtitious obſervations, which the hunters bind themſelves to obſerve.

Before *Siberia* was conquered by the *Ruſſians*, it abounded 136
with ſables; but, at preſent, wherever the *Ruſſians* are ſettled, none can be catched; for ſables retire at a diſtance from all inhabited places, and live in deſolate woods and mountains. The ſable hunters go up by the river *Vitime* and the two rivers 000
Mama, which fall into that river, as far as to the lake *Oronne*, which is upon the right hand, as high and higher than the great cataract, where the beſt hunting is. The fineſt ſables are caught upon

000 upon the little river *Kutomale*, which falls into the river *Vitime*, upon the right hand above the cataract and mouths of the lower *Mama* and the brook *Petrova*. Lower than these places the sables are considerably worse; and all the hunters agree that nearer the heads of the rivers the sables are better, and nearer the mouths still worse.

136 The sables live in holes, like other animals of their kind; such as martins, weasles, and ermines. The hunters also relate, that they build themselves nests upon the trees with rods and grass; that they sometimes lie in their nests and sometimes in their holes; that in summer as well as in winter they lie about twelve hours in their holes or nests, and in the other twelve they go about to seek their food. In the summer time, before the berries are ripe, they feed upon weasels, ermines, or squirrels, but chiefly upon hares; and in the winter upon birds. When the berries ripen, they eat cranberries and hurtleberries, but principally those of the service-tree, which causes them to itch and rub themselves against the trees, by which they wear off the hair from their sides. Hence it happens, when the service-berries are very plentiful, that the hunters lose their labour.

The sables bring forth their young in their holes or nests, about the end of *March* or the beginning of *April*; and have from three to five at a time, which they give suck to from four to six weeks.

000 They never hunt sables but in winter, for in the spring they cast their hair; which in the summer is very short, and even in the harvest does not come to perfection. Such sables are called *nedasobili*; that is, imperfect sables; and sell at a low price.

The sable-hunters, both *Russians* and natives, begin to set out for hunting about the end of *August*. Some *Russians* go themselves, and others hire people to hunt for them, giving them proper cloaths and instruments for hunting, and provisions for the time of their being out. When they return from the chace

chace they give their maſters all their game, and reſtore them likewiſe all that they received, except their proviſions.

A company, that agrees to hunt together, aſſembles from ſix to forty men, though formerly there were ſometimes even fifty. They provide a ſmall boat for every three or four men, which they cover over; and take with them ſuch perſons as underſtand the language of the people amongſt whom they go to hunt, and likewiſe the places propereſt for hunting. Theſe perſons they maintain at the publick charge, and give them beſides an equal ſhare of the game.

In the above-mentioned boats every hunter lays 30 poods of rye-flower, of wheat-flower one pood, of ſalt one pood, and of groats a quarter of a pood. Every two men muſt have a net, a dog, and ſeven pood of proviſions for the dog, a bed and covering, a veſſel for preparing their bread, and a veſſel to hold leaven. They carry out very few fire-arms, as they only uſe them in the harveſt, while they live in their huts.

The above-mentioned boats they draw againſt the ſtream of the *Vitime*, and out of the *Vitime* up the river *Mama*, or as far up as the lake *Oronne*, where they build huts for themſelves if they find none ready. Here they all aſſemble, and live until the river be frozen over. In the mean time they chuſe for their chief leader one who has been oſteneſt upon theſe expeditions; and to his orders they profeſs an entire obedience. He divides the company into ſeveral ſmall parties, and names a leader to each, except his own, which he himſelf directs: he alſo appoints the places where each party muſt hunt. As ſoon as the ſeaſon begins, this diviſion into ſmall parties is unalterable, even although the whole company ſhould conſiſt only of eight or ten, for they never all go towards the ſame place. When their leaders have given them their orders, every ſmall company digs pits upon that road which they muſt go. In theſe pits they lay up for every two men three bags of flower againſt their return, when they

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they ſhall have conſumed all their other proviſions; and whatever they have left in their huts, they are obliged to hide alſo in pits, leſt the wild inhabitants ſhould ſteal it.

As ſoon as the rivers are frozen over, and the ſeaſon is proper for the ſable-hunting, the chief of the leaders calls all the huntſmen into the hut, and, having prayed to God, gives orders to every chief of each ſmall company, and diſpatches them the ſame road which was before aſſigned them. Then the leader ſets out one day before the reſt to provide lodging places for them.

When the chief leader diſpatches the under leaders he gives them ſeveral orders; one of which is, that each ſhould build his firſt lodging to the honour of ſome church, which he names, and the other lodging places to the honour of ſuch ſaints whoſe images they have with them; and that the firſt ſable they catch ſhould be laid aſide in the quarter of the church, and at their return be preſented to it. Theſe ſables they call God's ſables, or the church's. The firſt ſable that is caught in the quarter of each ſaint is given to the perſon who brought the image of that ſaint with him.

On their march they ſupport themſelves with a wooden crutch about four feet long; upon the end of which they put a cow's horn, to keep it from being ſplit by the ice, and a little above they bind it round with a with and thongs, to hinder it from running too deep into the ſnow. The upper part is broad like a ſpade, and ſerves to ſhovel away the ſnow, or to take it up and put it into their kettles; for they muſt uſe ſnow, as they have frequently no water. The principal chief, having diſpatched the ſeveral ſmall parties, ſets-out with his own. When they come to their places of lodging they build little huts of trees, and bank up the ſnow round them. They hew ſeveral trees upon the road, that they may the more eaſily find their way in the winter. Near every quarter they prepare their trap-pits, each of which

which is ſurrounded with ſharp ſtakes, about ſix or ſeven feet high, and about four feet diſtant, and is covered over with boards to prevent the ſnow from falling in. The entrance through the ſtakes is narrow, and over it a board is hung ſo nicely, that by the leaſt touch of the ſables it turns and throws them into the trap; and they muſt abſolutely go this way to reach a piece of fiſh or fleſh with which the traps are baited. The hunters ſtay in one lodging until they have made a ſufficient number of theſe traps, every hunter being obliged to make twenty in a day; and ſo many do they make at every lodging place where they expect ſables. When they have paſſed ten of theſe quarters the leader ſends back the half of his company to bring up the proviſions that were left behind, and with the remainder he advances to build more huts and make more traps.

The people ſent back for the proviſions go with empty ſledges to the places where they were hoarded. Every man is obliged to draw ſix poods of flower, and half a pood of fleſh or fiſh, and to overtake the other hunters and their chief. Theſe carriers muſt ſtop at all the lodging places to ſee that their traps are in order, and take out any ſables they may find in them, and ſkin them, which none muſt pretend to do but the chief man of the company.

If the ſables are frozen, they thaw them by laying them under the cloaths with themſelves in bed. When the ſkin is taken off all preſent ſit down and are ſilent, being careful that nothing be hanging on the ſtakes. The ſkinned body of the ſable is laid upon dry ſticks, which they afterwards light; and carrying them three times round the body, they ſmoke it, and then bury it in the ſnow or earth. And often, when they apprehend the *Tunguſi* may meet with them and take away their booty, they put the ſkins into pieces of wood hollowed, covering the ends with ſnow, which being wetted will ſoon freeze. Theſe they hide in the ſnow near their huts, and gather them up

when they return in a body. When these carriers are come back with the provisions then the other half are sent for more; and thus they are employed in hunting, the leader always going before to build traps. When they find few sables in their traps they hunt with nets, which they can only do when they find the fresh track of a sable in the snow. This they follow until it brings them to the hole where the sable has entered; or if they lose it near other holes, they put smoaking pieces of rotten wood to them, which generally forces him to leave the earth. The hunter at the same time has spread his net, into which the sable commonly falls; and for precaution his dog is also near at hand: thus the hunter sits and waits sometimes two or three days. They know when the sable falls into the net by the sound of two very small bells that are fastened to it. Upon this the hunter runs himself, and puts on the dog, which seizes the sable and kills it: but they never put smoaky pieces of wood into those holes that have only one opening, because the sable will sooner be smothered than come towards the smoke; in which case he is entirely lost.

When they trace the sable to the root of some tree, they fasten their net about the tree, that, if after digging him out he should escape their hands, he may be taken in it. If the track goes towards some tree where they can see the sable, they shoot him with a blunt arrow: but if they cannot see the sable upon the tree among the branches, they cut it down, and placing their net where the top of the tree is to fall, which they can judge, stand themselves near the trunk; and the sable, jumping from it as it falls, drops into the net. Sometimes this does not happen, and then they search every hollow part of the tree. A sable that has once been in a net or trap is scarcely to be deceived a second time.

When the chief leader and all the hunters are gathered together, then the leaders of the small parties report to the chief how

how many ſables or other beaſts their party has killed, and if any of their parties have done any thing contrary to his orders and the common laws. Theſe crimes they puniſh differently: ſome they tie to a ſtake, others they oblige to aſk pardon of every one of the company; a thief they beat ſeverely, and allow him no ſhare of the booty; nay, they even take his own baggage from him, and divide it among themſelves. They remain in their head-quarters until the rivers are free of ice; and after the hunting they employ their time in preparing the ſkins. As ſoon as the ice is all gone off the rivers, they ſet out, in thoſe little boats which they came in, on their return home, where they give the ſables to the ſeveral churches to which they promiſed them; and then, having paid their tax-furrs, they ſell the reſt, dividing equally the money, or goods, which they receive for them.

CHAP. VIII.

Of the SEA BEASTS.

UNDER the name of ſea beaſts are here underſtood ſuch animals as are called amphibious, which, although they live for the moſt part in the water, frequently come upon the dry land, and upon, or near it, bring forth their young. Water beaſts may be divided into three claſſes: 1ſt, Thoſe which live in freſh water lakes, and rivers, as the otter. 2d, Thoſe which live in freſh or ſalt water, ſuch as ſeals. 3d, Thoſe which are never found in freſh water, ſuch as ſea beavers, ſea cats, and others.

Although otters be very common in *Kamtſchatka*, yet the price is not low; a very indifferent ſkin will coſt a ruble. They

225 commonly hunt them with dogs when the ſnow comes in drifts,
237 and they wander at too great a diſtance from the river. They uſe their ſkins to make borders round their garments, but principally to preſerve the ſable-ſkins, which are obſerved to be preſerved better, when wrapt in otter-ſkins than any other way.

136 It is incredible to think what a number of ſeals there are in the ſeas and lakes of that country, eſpecially when the fiſh come up the rivers, which they follow in droves, not only to the mouth, but even far up the ſtream. So numerous are they that all the iſlands or ſand-banks are quite covered with them, inſomuch that ſmall boats are in great danger near theſe places. When the ſeals obſerve any boat approaching they throw themſelves in great numbers into the water, which makes ſuch a motion in it as will overſet the canoes or ſmall boats, if they go at once into it. No animal has a more diſagreeable cry, and their noiſe is inceſſant.

There are reckoned to be four ſorts of this animal; the very largeſt of which is catched from 56° to 64° of north latitude. This ſort only differs from the others in its bulk, which exceeds that of a large ox. The ſecond ſpecies is about the ſize of a yearling bullock. Their ſkin is of different colours, ſomething like the ſkin of a tyger; having ſeveral ſpots of equal largeneſs on the back, with a white and yellowiſh belly. Their young ones are as white as ſnow. The third is yet leſs than the former. Its ſkin is yellowiſh, with large cherry-coloured circles, which take up near the half of its ſurface. The fourth kind is ſeen in the large lakes of *Baikaal* and *Oronne*. Its ſize is like thoſe that are found near *Archangel*; and their colour is whitiſh.

They are very vivacious: I ſaw one, that was taken by a hook in the mouth of the Great River, throw itſelf upon people with great fierceneſs, even after its ſkull was broken into pieces. I obſerved that he was no ſooner brought on ſhore than

than he began to try to run again into the river; and when he 136
found that this was impoſſible, he began to weep; and when they beat and bruiſed him, it only made him more fierce and wild.

The ſeals never go farther from the ſhore than 30 leagues; and are moſt commonly to be found near the mouths of great rivers or bays: they will follow the fiſh 80 verſts up a river. They bring forth only one young one, which they nouriſh with two breaſts. The *Tunguſi* give the ſeals' milk to their children for a medicine. The old ſeals cry like one that ſtrains in vomiting, and the young like people groaning through pain. When the tide goes out they lie upon the dry rocks, and in play puſh one another into the water; but when they begin to be angry they bite one another very cruelly. They ſleep very ſound: but, being awakened by the approach of any one, they are in very great fear; and haſtening towards the ſea, to make the way ſmoother, as is ſuppoſed, they vomit out water.

There are different ways of killing them: In the rivers 225
they ſhoot them with ſcrewed-barrelled guns; but they muſt be careful to hit the head, becauſe a hundred bullets will not do them the leaſt hurt in any other place, as they all lodge in the fat that covers their body. They ſearch for them upon ſhore, and ſurpriſing them in their ſleep kill them with clubs: or when they ſleep, laying their ſnout upon the ice, they drive a knife quite through the ſnout, which being faſtened to a long thong they drag the animal out.

The ſeals are not ſo dear as one would imagine the many uſes 237
they put them to ſhould render them; for, beſides the uſe of their fat and fleſh, the ſkins of the larger ſort ſerve for ſoles of ſhoes. The *Koreki*, *Olutores*, and the *Tchukotſkoi*, alſo make boats or baidares with them of different ſizes, ſome even ſo large that they will carry thirty men. Theſe boats have this advantage over

thoſe

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237 thoſe made of timber, in that they are much lighter and go
262 ſwifter. Of the ſeals' fat both *Ruſſians* and *Kamtſchadales* make candles; and beſides the natives eſteem it ſuch a delicacy that
251 they can have no feaſt without it. The fleſh they boil or dry in the ſun; but if there are great quantities, they ſmoke or bake it in the following manner: They dig a large pit in proportion to the quantity of fleſh or fat, and pave the bottom with ſtones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the aſhes, then lay at the bottom a layer of green poplar wood, upon this another of ſeals' fleſh or fat, each ſeparately; and thus alternately wood and fleſh until the pit be quite full. They then cover it with graſs and earth, to keep in the heat; and after ſome hours they uncover it, take out the fat and fleſh, and lay it up for the winter. Both fleſh and fat thus prepared is much more delicate than what is boiled; beſides, it keeps without ſpoiling for a whole year.

825 When they have picked all the fleſh from the heads of the
796 ſeals they ſhew them all the reſpect that they would to a particular friend that viſits them. I ſaw this ceremony in the
782 year 1740 at the little fort of *Krodakighe*, which ſtands upon a river of the ſame name that falls into the Eaſtern Ocean. It was performed in the following manner: They brought in the ſkull or head of a ſeal, bound round with the ſweet graſs, and placed it upon the floor. Then a *Kamtſchadale* entered with a bag filled with the ſweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtſchadales* rolled in a great ſtone, and ſet it oppoſite to the entry of the hut, about which they laid ſeveral ſtones; and two others tore the ſweet herb, and made it into ſmall bunches. The great ſtone was to ſignify the ſea, the ſmaller the waves, and the bunches of the ſweet herb the ſeals. This being done, they took three diſhes of caviar mixed with kipre, hurtleberries, and ſeals'

fat

fat. This they ſqueezed into balls, in the middle of which they 825
preſſed the ſweet herbs which were made to repreſent the ſeals: 796
out of the birch bark they made little boats, which they filled 782
with theſe balls made as above, and covered them with herbs.

After ſome time they took theſe boats and balls and toſſed them to and fro over the ſtones as if over waves, that the other ſeals might ſee with what reſpect the *Kamtſchadales* treated their friends, and conſequently might the more willingly fall into their hands. After this they placed the ſeals made of the ſweet herbs near to the great ſtone, or ſea, and all went out of the hut; but one old man, after he had ſet upon the threſhold a ſmall diſh with their broth which he had carried out to them, entered into it again, all the aſſiſtants crying aloud four times the word *Lignouieghe*. They could not tell what this term meant; nor could they give any other reaſon for their ſo crying out, but that their fathers did ſo. After this they again rolled the birch boats upon the ſtones; and going again out of the hut cried, as before, *Kouneouſhite-aloulaighe*; that is, May the wind blow towards the ſhore. For while this wind blows a great deal of ice is driven towards the land, which is favourable for their killing the ſea animals. Returning into their huts, they rolled their birch boats a third time over the ſtones. They then put the ſkulls of the ſeals into a bag, and every fiſher preſent put in alſo a little of the ſweet graſs, with his name and ſome particular ſentence; that the ſeals might know how they had entertained them, and what valuable preſents they had made them.

Having, as they thought, by their entertainment and preſents, ſhewn all reſpects to their gueſts, they brought them out to the ſtair-head, where an old man put ſtill ſome more of their gruel into the bag, deſiring them to carry that to their friends that had been drowned at ſea. Then two *Kamtſchadales* who had been principally employed in this entertainment, took the bowls that

were

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825 were filled with gruel and the ſeals made of graſs, and gave one
796 to each fiſher. They then went all out of the hut, and cried
782 *Uenic*; a word they uſe in calling to one another when they go to kill the ſeals or other ſea animals. Then taking out the ſeals made of graſs they threw them into the fire, praying them to make them frequent viſits; after which, returning into the hut, they put out the fire, and eat the gruel that was in the bowls.

136 The ſea horſe is but ſeldom ſeen about *Kamtſchatka*, and then only in the moſt northernly places. The moſt are caught near the cape of *Tchukotſkoi*, being both larger and more numerous there than any where elſe. Their teeth are what we commonly call fiſh-bone, the price of which depends upon their largeneſs or weight: the deareſt are thoſe that are about twenty pounds; but theſe are ſeldom met with, or even ſuch as weigh ten or twelve pounds, the common weight being five or ſix pounds.

The ſea lion * and cat, in their uſual ſtructure, differ very little from the ſea horſe and ſea calf, and are therefore to be reckoned of the ſame kind.

Some call the ſea lions ſea horſes, becauſe they have manes. In their ſhape they are like the ſea calf; and their necks are bare, excepting a ſmall mane of hard curled hairs: the reſt of their body is covered with a cheſnut-coloured hair. They have a middle-ſized head, ſhort ears, a ſnout ſhort and drawn up like a pug dog's, great teeth, and webbed feet. They are found moſt frequently about rocky ſhores or rocks in the ſea, upon which they climb very high, in great numbers. They roar in a ſtrange, frightful manner, much louder than the ſea calf; and they are thus far of uſe to people at ſea, that in foggy weather, by their roaring, they warn them of rocks or iſlands being near, as few rocks or iſlands in this part of the world are without theſe animals.

* Leo marinus. STELLER.

Although

Although in appearance and ſize this animal ſeems to be very 136
dangerous, and marches with ſuch a fierce mien that he looks like a true lion, yet is he ſuch a coward, that at the ſight of a man he hurries into the water; and when he is ſurpriſed aſleep, and awakened either by a loud cry or blows with a club, he is in ſuch fear and confuſion, that in running away he falls down, all his joints quaking with terror; but, when he finds no poſſibility of eſcaping, he will then attack his enemy with the greateſt fierceneſs, ſhaking his head and roaring very terribly; and then the boldeſt muſt ſeek to ſave himſelf from his rage. For this 225
reaſon the *Kamtſchadales* ſeldom kill the ſea lions at ſea, unleſs when they can ſurpriſe them ſleeping there, but generally upon land; and when they find them aſleep on ſhore they approach them with great caution, going againſt the wind. But none dare undertake this game, but ſuch as can truſt to their ſtrength or their heels. Stealing upon them, they ſtrike a knife into their breaſt under their fore paw; the aſſiſtants in the mean time tying a cord made of ſea calf's ſkin, which is faſtened to the knife, about a ſtake. Then every one runs off as faſt as he can, and endeavours at a diſtance to wound him with arrows, or knives, which they dart at him; and at laſt, when his ſtrength is quite waſted, they diſpatch him with clubs.

When they find them aſleep at ſea, they ſhoot poiſoned arrows at them, and get off as faſt as poſſible. The wounded animal, unable to ſuffer the pain ariſing from the ſalt water in the poiſoned wound, runs himſelf aſhore, where they kill him outright with darts or arrows; or if the place is not ſafe for ſuch an attack, they wait until he dies of his firſt wound, which follows in 24 hours. This game is ſo honourable among the natives, 554
that the man who has killed moſt of theſe beaſts is eſteemed the 225
greateſt hero: for this reaſon many engage in this dangerous hunting, not only for the fleſh, which is looked upon as very delicate, but rather for the honour that attends it. Two or

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225 three ſea lions are a great load for their boats; and, as it is
502 eſteemed diſhonourable to leave any game which they have caught, they ſometimes ſo overload their boats, that, though they are very expert in the management of them, they and their game go to the bottom together. In theſe veſſels they go to the deſert iſland *Alaide*, which lies out at ſea about thirty miles, and are ſometimes carried four, five, and even eight days without ſeeing any land, expoſed to the cold of theſe climates; and without any compaſs, they return to their habitations by obſerving the ſun or moon.

237 Of the ſkins of the ſea lion they make cords, ſhoe-ſoles, and
136 ſhoes. The female has two, three, and ſometimes four young ones. They couple in the months of *Auguſt* or *September*; and are pregnant about ten months, as they generally bring forth their young about the beginning of *July*. The male treats the female with great tenderneſs, not like the ſea cat, but by fondneſs endeavours to gain her affection. Both male and female ſeem to take very little care of their young, frequently ſtifling them under their paws as they ſuck; nor do they ſhew
136 any concern at ſeeing them killed before their eyes. The young are not lively nor full of play, like moſt other young animals; but are almoſt continually aſleep. Towards the evening the male and female ſwim out to ſea with their brood, but not far from the ſhore. The young climb upon the mother's back, and reſt themſelves; the male in the mean time playing about toſſes the lazy puppies into the water, to oblige them to learn to ſwim. Some of them have been thrown into the ſea, but inſtead of ſwimming away they haſten again to land. They are twice as large as the young of the ſea cat. Although theſe animals naturally run from a man, yet it has been obſerved that they are not always ſo wild; particularly when their young have ſcarcely learned to ſwim. Mr. *Steller* lived ſix days in a high place amongſt whole herds of them, and out of his hut ſaw

ſeveral

ſeveral of their actions. The animals lay around him, ſeeming to obſerve his fire and what he was employed about; and never ran away, although he even went amongſt them, and ſeized ſome of their young for his diſſections, but remained quite at their eaſe. They went about and quarrelled for their miſtreſs without being diſturbed by his preſence; and one male fought three days for a female, and was wounded in more than a hundred places. The ſea cats never take any part in their quarrels, but endeavour to get out of the way as far as they can, giving place to them; nay, they never hinder the puppies of the ſea lion from playing with them, taking all care not to hurt them in the leaſt: but the ſea cats ſhun the company of the ſea lions as much as poſſible.

The old beaſts are grey about the head, and certainly live to a great age. They ſcratch their head and ears with their hinder paw, as the ſea cats do; and their manner of ſtanding, going, lying, and ſwimming, is the ſame. The great ones low like an ox, and the young bleat like ſheep: the old ones ſend forth a ſtinking ſmell, but not ſo much as the ſea cat. In winter and ſummer they do not always live indifferently upon all places, but ſeem to have their ſtations proper for the ſeaſon. They are never found further north than 56°, although in great plenty about *Kamtſchatka*, and the iſlands of the *American* coaſt. Their food is fiſh, ſeals, ſea beavers, or other water or land animals. The old ones eat little in the months of *June* or *July*, when they only lie and ſleep, and thence become very lean.

The ſea cat is about half the ſize of the ſea lion; in form reſembling the ſeal *, but thicker about the breaſt, and thinner towards

* *Frederick Marten*, in his voyage to *Greenland*, thus deſcribes the ſea dogs, called *Rubbs* or *Seals*: "Their teeth are ſharp like dog's teeth; on their toes they have black, long, and ſharp claws; their tail is ſhort; they bark like hourſe dogs, but their young mew like cats. When they are frightened by

/36 towards the tail. They have a ſnout longer than the ſea lion's, and larger teeth; with eyes like cows' eyes, ſhort ears, naked and black paws, and black hair mixed with grey, which is ſhort and brittle. Their young are of a bluiſh black colour.

The ſea cats are caught in the ſpring and in the month of *September*, about the river *Shupanova*; at which times they go from the *Kuriſkoy* iſland to the *American* coaſt: but the moſt

'by any noiſe, they hold up their noſes 'very high, and make a long neck like 'our greyhounds, and bark; and when 'thus alarmed we ſtrike them with half 'pikes, or long poles, upon their noſes, 'and knock them down half dead; but 'for all that they will recover them-'ſelves and riſe again. Some of them 'will ſtand on their defence, bite at, 'and run after us. Sometimes they run 'from the ice to the water, and leave a 'yellow dung behind them, which they 'ſquirt out at their hunters. Their fat 'is about three or four fingers thick, 'and covers the fleſh juſt under the ſkin. 'They have great livers, lungs, and 'hearts. When they couple they are ſo 'fierce, that we are obliged to kill 'them from our boats, no man daring 'to go near them. One of them near 'eight feet long was not killed, though 'we had cut off moſt of his fat, and 'notwithſtanding all our blows would ſtill 'bite and ſnap at us. I ran another 'ſeveral times through the body with 'my ſword, which he did not in the 'leaſt regard; he at laſt got up, and 'ran ſwifter than I could, and flung him-'ſelf off from the ice into the ſea, and 'went down to the bottom.'

From the ſame author we have alſo the following account of the ſea horſe. 'It 'is imagined that theſe animals, ſays he, 'feed both on herbs and fiſh; that they 'eat herbs we conclude from the reſem-'blance between their dung and that of 'the horſes', and we ſuppoſe they eat 'fiſh from this circumſtance, when we 'threw the ſkin and fat of a whale into 'the ſea, one of theſe creatures came and 'drew it under water with him. They 'are remarkable for their courage and 'ſtrength, and the reſolution with which 'they defend each other is ſurpriſing; for 'when any were wounded by my people, 'they made to the long boat, and with 'their great teeth cut holes in it under 'water, whilſt others moſt undauntedly 'erected half their body out of the water 'and endeavoured to get into the boat. 'In one of theſe engagements a ſea horſe 'took hold of our harpooneer with his 'long tooth by the waiſtband of his 'breeches, and had not the waiſtband 'broke, would certainly have pulled 'him over-board. At *Muff*'s iſland we 'killed ſeveral hundred of them, and 'made a very good voyage. When 'they are killed the ſailors only bring 'off the head, as nothing but the two 'great teeth are of any value; theſe 'alſo were formerly in greater eſtimation 'than they are at preſent.'

are

are catched about the cape of *Kronotzkoy*, as between this and 136
the cape *Shupinskoy* the sea is generally calm, and affords them properer places to retire to. Almost all the females that are caught in the spring are pregnant; and such as are near their time of bringing forth their young are immediately opened, and 825
the young taken out, and skinned. None of them are to be seen from the beginning of *June* to the end of *August*, when they return from the south with their young. The natives were formerly at a loss to conceive where such great herds of pregnant fat animals retired in the spring, and why they returned so weak and lean in the summer: they conjectured, that as they thus regularly swam from the south in the spring, and returned in the summer, their being so lean was owing to their fatigue.

The females bring forth their young there, and being at rest 136
recover their former strength; they nurse their young ones three months, 'till they are able to return with them to their former habitations in the summer. The females suckle their young with two teats, which are placed between their hinder paws; they have seldom more than one; and when they bring forth they gnaw off the navel string like a dog, and greedily eat the after-birth. The young see when they are whelped, their eyes being as large as the eyes of an ox; and have thirty-two teeth, not reckoning their tusks, two of which are on each side, and begin to appear the fourth day after their birth. Their colour at the first is a dark blue; but in four or five days grey hairs begin to appear between their hinder legs, and at the end of one month their belly is black and grey. The male is born larger and blacker, and even continues blacker than the female, which turns almost of a blue colour as she grows up, having only grey spots between her fore legs. The male and female differ so much in the form and strength of their bodies, that one who does not carefully examine them would take them for different species of animals

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136 mals; besides the females are mild and fearful. The male has from eight to fifteen, and even sometimes fifty females, whom he guards with such jealousy that he does not allow any other to come near his mistresses: and though many thousands of them lie upon the same shore, yet every family keeps apart; that is, the male, with his wives, young ones, and those of a year old, which have not yet attached themselves to any male; so that sometimes the family consists of 120. They likewise swim at sea in such droves. Such as are old, or have no mistresses, live apart; and the first that our people found upon *Bering*'s island were such old ones, and all males, extremely fat and stinking. These sometimes lie asleep a whole month without nourishment, and are the fiercest of all, attacking all that pass them; and their pride or obstinacy is such that they will rather die than quit their place. When they see a man coming near them, some of them rush upon him, and others lie ready to sustain the battle. They bite the stones that are thrown at them, and rush the more violently upon him who throws them; so that though you strike out their teeth with stones, or put out their eyes, yet even blind they will not quit their place: nay, they dare not leave it, for every step that any one moves off he makes a new enemy, so that though he could save himself from the attacks of men, his own brethren would destroy him; and if it happens that any one seems to retire the least, then others draw near no prevent his running away; and if any one seems to suspect the courage of another, or his design to run away, he falls upon him. This suspicion of one another is sometimes carried so far, that for a whole verst one sees nothing but these bloody duels; and at such a time one may pass them without any manner of danger. If two fall upon one, then some others come to support the weakest; for they do not allow of unequal combat. During these battles the others that are swimming in the sea raise their heads, and look at the success

of

of the combatants; at length becoming likewiſe fierce, they come 136
out and increaſe the number.

Mr. *Steller* made this experiment:—With his Coſſacks he fell upon one of theſe ſea cats, and put out his eyes, and irritated four or five more by throwing ſtones at them. When theſe purſued him he ran towards the blind one, who hearing the running of his companions, and not knowing whom they purſued, attacked them. Mr. *Steller* retired to a high place, where he obſerved the battle for ſome hours. The blind one attacked without diſtinction all the reſt, even thoſe who took his part; ſo that at laſt they all fell upon him, and allowed him no reſt either upon the land or in the ſea, out of which they dragged him to the ſhore, and beat him until he died.

When two of them only fight, the battle laſts frequently for an hour: ſometimes they reſt awhile, lying by one another; then both riſe at once, and renew the engagement. They fight with their heads erect, and turn them aſide from one another's ſtroke. So long as their ſtrength is equal they fight with their fore paws; but when one of them becomes weak the other ſeizes him with his teeth, and throws him upon the ground. When the lookers on ſee this they come to the aſſiſtance of the vanquiſhed. The wounds they make with their teeth are as deep as thoſe made with a ſabre; and in the month of *July* you will hardly ſee one of them that has not ſome wound upon him. After the end of the battle they throw themſelves into the water to waſh their bodies. The occaſions of their quarrels are theſe:—The firſt and moſt bloody is about their females, when one endeavours to carry off the miſtreſs of another, or the young ones that are females; the females that are preſent follow the conqueror. The ſecond is about their places, when one comes too near that of another, which they don't allow, either for want of room, or becauſe they are jealous of their coming too near their

136 their miſtreſſes. The third is owing to their endeavouring to do juſtice, and end the quarrels of others.

The male is very fond of the young ones; on the other hand, the females and young fear him extremely, and he treats them moſt tyrannically. If you endeavour to catch a young one, the male ſtands upon the defence, and the female is allowed to ſave herſelf and the young one by flight; but if ſhe drops the young one out of her mouth, the male leaves his enemy, and ſeizing upon her with his teeth beats her againſt the ſtones 'till he leaves her for dead. As ſoon as ſhe recovers, ſhe crawls to his feet, which ſhe licks and waſhes with her tears that flow in abundance. In the mean time, the male ſtalks backwards and forwards, gnaſhing his teeth, and toſſing his head like a bear; at laſt, when he ſees they have carried off the young one, he likewiſe begins to weep; for they ſhed tears, when they are much wounded or injured, and are not able to revenge the injury.

Another reaſon of the ſea cats going in the ſpring eaſtwards to the Deſert Iſlands muſt be, that reſting and ſleeping without nouriſhment for three months, they free themſelves from the fat which was troubleſome to them, in the ſame manner as the bears who live the whole winter without nouriſhment; for in the months of *June*, *July*, and *Auguſt*, the old ones do nothing but ſleep upon the ſhore, lying in one place like a ſtone, now and then looking at one another, and yawning and ſtretching, without meat or drink; but the young ones begin to walk in the beginning of *July*. When this animal lies upon the ſhore and diverts himſelf, his lowing is like that of a cow; when he fights, he growls like a bear; when he has conquered his enemy, he chirps like a cricket; but being vanquiſhed or wounded, he groans or mews like a cat; coming out of the water, he commonly ſhakes himſelf, ſtrokes his breaſt with his hinder paws, and ſmooths the hair upon it. The male lays his ſnout to that

of

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of the females, as if he was kiſſing her. When they ſleep in the ſun, they hold up their paws, wagging them as the dogs do their tails. They lie ſometimes upon their backs, at other times like a dog upon their bellies; ſometimes contracting, at other times extending themſelves. Their ſleep is never ſo ſound but that they awake at the approach of any perſon, how ſoftly ſoever he goes, and are preſently upon their guard; beſides their ſmell and hearing are ſurpriſingly acute. /136

They ſwim ſo faſt that they can eaſily make ten verſts in an hour; and when they happen to be wounded at ſea they ſeize the boats of the fiſhers with their teeth, and drag them along with ſuch ſwiftneſs that they appear to fly and not to ſwim upon the water. By this means the boat is frequently overturned and the people drowned, unleſs he who ſteers it be very ſkilful, and obſerves the courſe of the animal. As they have a *foramen ovale*, they can keep long under water; but when they grow weak they come to the top to receive freſh air. They often ſwim upon their back, and ſo near the ſurface of the water that their hinder paws are frequently dry. When they go from the ſhore into the water, or when they dive after having taken breath, they turn themſelves like a wheel, as many other large ſea animals do. They faſten their fore paws in the rocks, and thus draw up their body, which they can move but ſlowly in ſuch places, but upon a plain, one is in danger of being overtaken by them. Upon *Bering*'s iſland there are ſuch numbers of them that they cover the whole ſhore; ſo that travellers are frequently obliged for ſafety to leave the ſands and level country, and go over the hills and rocky places. It is remarkable that in this iſland the ſea cats are found only upon the ſouth coaſt which looks towards *Kamtſchatka*. The reaſon of this may be, that this is the firſt land they meet with going eaſt from the *Kronotzkoy* Noſs.

000 The manner of catching them in *Bering*'s iſland was this: They firſt ſtruck out their eyes with ſtones, and then killed them by beating out their brains with clubs: but this was a work of ſo much labour, that three men were hardly able to kill one with 300 ſtrokes; and though ſometimes the ſkull was broken in pieces, and the brains came out, and all their teeth beaten out, yet they would keep their place, ſtanding upon their hinder paws, endeavouring to defend themſelves. One of them thus miſerably treated was left to ſee how long it would live, which it did full two weeks without quitting its place.
225 They ſeldom come aſhore about *Kamtſchatka*; ſo that the inhabitants chace them in boats, and throw darts or harpoons at them, which ſtick in their body; to this harpoon is fixed one end of a rope, and the other is in the veſſel; and by this rope they draw them towards the boat; but here they are to be particularly cautious whenever they chace one, if he comes near, not to ſuffer him to faſten upon the ſide of the boat with his fore paws, and overturn it; to prevent which ſome of the fiſhermen ſtand ready
136 with axes to cut off his paws. Several of theſe animals die of old age, but the greateſt part of the wounds they receive in the quarrels that happen among them; of which there are ſometimes ſo many, that the ſhore is covered with bones.

The ſea beavers * have not the leaſt reſemblance of the other beavers; but the people formerly gave them that name from their downy hair, which reſembles that of the beaver. They are as large as the ſea cats; their ſhape reſembles the ſeal, and their head the bear; their fore feet are longer than their hind feet; their teeth ſmall; their tail ſhort and flat, and ſharp towards the point; their hair is thick and black as pitch,
1. [the sea cats]

* Lutra marina.

but

but in the old ones it turns grey. The young ones have 136
their hair long, brownish, and very soft. This is the most peaceable of all the sea animals; it never makes any resistance, but endeavours to save itself by flight. The females are very affectionate to their young, and carry such as cannot swim upon their belly between their fore feet; for until the little ones can swim themselves the mother swims upon her back. When the fishermen pursue them, they never quit their young' till the very last extremity; and if they should happen to slip them they presently return to where they hear them cry; so that the fishers endeavour to kill or catch the young, as the most effectual method of taking their dams. They have three different ways of catching 225
them: 1st. By nets placed among the sea cabbage*, whither the beavers retire in the night time, or in storms. 2dly, They chace them in their boats, when the weather is calm, and kill them in the same manner they do sea lions or sea cats. The third method is upon the ice, which in the spring is driven on the coast by the east wind; and this last is so general, that when the ice is driven so strongly upon the shore that the people can pass upon it with snow shoes, they consider it as an acquisition of great treasure, and all the inhabitants upon the coast hunt and kill vast numbers, as they stalk along the ice seeking an opening to get into the water. However, such a drift of ice upon the coast does not happen every year, but when it does, they call it a good year; for the natives, Cossacks, and merchants, find a great advantage from this trade. The *Kuriles* did not 237
esteem the skins of beavers more than those of seals or sea lions 291
before they saw the value that the *Russians* put upon them; and even now they will willingly exchange a dress made of beavers'

* Focus marinus.

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237 for a good one made of dogs' ſkins, which they think are warmer,
291 and a better defence againſt the water.

Beſides thoſe already deſcribed, there are ſeveral other ſea
136 animals here, the moſt remarkable of which is the manati, or ſea cow. This animal never comes out upon the ſhore, but always lives in the water; its ſkin is black and thick, like the bark of an old oak, and ſo hard that one can ſcarcely cut it with an ax; its head in proportion to its body is ſmall, and falls off from the neck to the ſnout, which is ſo much bent that the mouth ſeems to lie below; towards the end the ſnout is white and rough, with white whiſkers about nine inches long; it has no teeth, but only two flat white bones, one above, the other below; its noſtrils are near the end of its ſnout, in length and breadth about an inch and a half; they are double, and within are rough and hairy; its eyes are black, placed almoſt in the middle, and near in one line with the noſtrils, they are no larger than ſheep's eyes, which is certainly remarkable in ſuch a monſtrous creature; it has no eyebrows nor eyelaſhes; and its ears are only a ſmall opening; its neck is not eaſily diſcovered, the head and body being ſo nearly joined; however, there are ſome vertebræ proper for turning the head upon, which it actually does, particularly when it feeds, hanging its head like a cow; its body is round like that of a ſeal, being thickeſt about the navel, and growing ſmaller towards the head and tail; the tail is thick, and bent a little towards the end; it ſomething reſembles the beard of the whale, and ſomewhat the fins of a fiſh; its paws, which are under its neck, are about 21 inches long, with them he both ſwims and goes, and by them he takes hold of the rocks, to which he ſometimes faſtens himſelf ſo ſtrongly, that when he is dragged from thence with hooks he will leave the ſkin of his paws behind: it is obſerved that theſe paws are

ſometimes

ſometimes divided in two, like the hoof of a cow; but this 136
does not ſeem to be common, only accidental. The females have two teats upon their breaſts. The length of the manati is about 28 feet, and its weight about 200 pood. Theſe animals go in droves in calm weather near the mouths of rivers; and though the dams oblige their young always to ſwim before them, yet the reſt of the herd cover them upon all ſides, ſo that they are conſtantly in the middle of the drove. In the time of flood they come ſo near the ſhore, that one may ſtrike them with a club or ſpear; nay, the author relates that he has even ſtroked their backs himſelf with his hand. When they are hurt they ſwim off to ſea, but preſently return. They live in families, one near another; and a family conſiſts of a male, female, ſome half grown, and one ſmall calf: hence it appears that every male has one female. They bring forth their young in the harveſt, and never more than one at a time.

They appear to be extremely gluttonous, eating ſo continually without any regard to their own ſafety, that they hardly ever lift their heads above the water; ſo that any one may go among them in boats, and chuſe which he pleaſes to carry off. The half of their body, that is their back and ſides, is always above water, upon which flocks of crows ſettle, and pick the lice out of their ſkins. They do not feed upon every herb, but, firſt, upon ſea cabbage *, which has a leaf reſembling ſavoys; ſecondly, upon cabbage † reſembling a club; thirdly, upon cabbage ‖ reſembling thongs; and, fourthly, upon a waved kind of cabbage ‡: and wherever they have been, though but for one day, heaps of roots and ſtalks are thrown out upon the ſhore.

* Fucus Coiſpus braſſicæ ſabaudicæ folio cancellatus. † Fucus clavæ facie.
‖ Fucus ſcuticæ antiquæ Romanæ facie. ‡ Fucus longiſſimus ad nervum undulatus.

When

136 When they have eaten their fill, they lie asleep upon their backs. As soon as the ebb begins they retire to the sea, fearing to be left upon the shore. In the winter time they are frequently crushed by the ice against the rocks, and thrown out upon the beach. This happens during a storm, when the wind is upon the shore. At this season they are so lean that one may count all
225 their ribs and vertebræ. They are caught with great iron hooks,
136 something like the fluke of a small anchor. This hook is carried by a strong man in a boat with three or four rowers, who when he comes among the herd strikes into one of them. Thirty men that are left upon the shore, and hold one end of a rope which is fastened to the hook, draw the manati towards the land; and in the mean time those that are in the boat stab and cut it 'till it dies. I once saw some of the fishers cut off the flesh from the creature, while it was alive, who all the while struck the water with its paws with such force that the skin was torn off them; but at last it expired. It is easier to catch the old ones than the young: for the last are more active, and the skin being softer the hook frequently looses its hold. When one of them is struck, and struggles to clear himself of the hook, those of the herd that are nearest to him come to his assistance: some overturn the boat by getting under it; others lay themselves upon the rope, as if they could break it; and others endeavour to strike out the hook with their tails, which sometimes
136 succeeds. The love that is between the male and female is extraordinary; for after the male has used all methods to assist and rescue the female, he follows her even dead to the very shore, and has been observed sometimes even after two or three days to remain by the dead body. This animal cannot be said to low, but rather brays hard, which is particularly observable when it is wounded. It cannot be said how sharp

their

their ſight or hearing is; but both ſenſes appear to be very weak, perhaps from their keeping their heads always under water. 136

There is ſuch a plenty of manati in *Bering*'s iſland, that it is ſufficient to maintain all the people of *Kamtſchatka*. Their fleſh, though it takes a long time to boil, taſtes well, and is ſomething like beef. The fat of the young reſembles pork, and the lean is like veal. This fleſh is eaſily boiled, and ſwells ſo much that it takes up double the ſpace when boiled that it did raw. It is impoſſible to boil the fat about the head and tail; but the ribs and back are very delicate. Some pretend that the fleſh of this animal will not keep in ſalt; but we found the contrary, it appearing to us little inferior to ſalted beef *.

Beſides

* That the *Kamtſchatka* manati is the ſame kind of animal with that found by Captain *Dampier* in the rivers of *South America* and at the *Philippine Iſlands*, is evident from that author's deſcription of it:

'This creature is about the bigneſs of 'a horſe, and 10 or 12 feet long. The 'mouth of it is much like the mouth of 'a cow, having great thick lips. The 'eyes are no bigger than a ſmall pea, 'the ears are only two ſmall holes on 'each ſide of the head. The neck is 'ſhort and thick, bigger than the head. 'The biggeſt part of this creature is at 'the ſhoulders, where it hath two large 'fins, one on each ſide of its belly. 'Under each of theſe fins the female 'hath a ſmall dug to ſuckle her young. 'From the ſhoulders towards the tail it 'retains its bigneſs for about a foot, 'then it groweth ſmaller and ſmaller to 'the very tail, which is flat, and about '14 inches broad, and 20 inches long, 'and in the middle four or five inches 'thick, but about the edges of it not 'above two inches thick. From the 'head to the tail it is round and ſmooth, 'without any fin but thoſe two before 'mentioned. I have heard that ſome 'have weighed above 1200lb. but I 'never ſaw any ſo large. The manati 'delights to live in a brackiſh water; 'and they are commonly in creeks or 'rivers near the ſea. 'Tis for this rea-'ſon, poſſibly, they are not ſeen in the 'South Seas, (that ever I could obſerve) 'where the coaſt is generally a bold 'ſhore, that is, high land deep water 'cloſe home by it, with a high ſea or 'great ſurges; except in the bay of *Pa-'nama*, yet even there is no manati: 'whereas the *Weſt Indies*, being as it 'were one great bay compoſed of many 'ſmaller, are moſtly low land and ſhoal 'water, and afford proper paſture (as I 'may

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 Besides the above-mentioned animals, Mr. *Steller* saw upon the coast of *America* a new and uncommon sea beast, which he thus describes: Its length is about five feet; its head like a dog's; its ears sharp, and standing up; and its eyes large; upon its upper and under lips it has hairs like a beard; its make is thick and round; thicker towards the head, thin and small towards the tail; the whole body is covered with thick hair, grey upon the back, and red or sorrel towards the belly; the tail fin divides itself into two, the uppermost of which is longest. The author was extremely surprised that he could not discover any feet or paws, as in other sea animals. Its appearance in general was something like the draught of that creature, which *Gesner* gives under the name of sea monkey; and the author thinks that the name of monkey is not improperly applied to this animal for its remarkable activity and many tricks. It sometimes swam after their vessel for two hours, looking first at

'may say) for the manati. Sometimes 'we find them in salt water, sometimes 'in fresh, but never far at sea; and those 'that live in the sea at such places where 'there is no river nor creek fit for them 'to enter, yet do commonly come once 'or twice in 24 hours to the mouth of 'any fresh-water river that is near their 'place of abode. They live on grass 'seven or eight inches long, and of a 'narrow blade, which grows in the sea in 'many places, especially among islands 'near the main. This grass groweth 'likewise in creeks, or in great ri-'vers, near the sides of them, in such 'places where there is but little tide or 'current. They never come ashore, nor 'into shallower water than where they 'can swim. Their flesh is white, both 'the fat and the lean, and extraordinary 'sweet and wholesome meat. The tail 'of a young cow is much esteemed; 'but if old, both head and tail are very 'tough. A calf that sucks is the most 'delicate meat: privateers commonly 'roast them; as they do also great pieces 'out of the bellies of the old ones.

'The skin of the manati is of great 'use to privateers; for they cut them 'into straps, which they make fast on 'the side of their canoes, through which 'they put their oars in rowing instead of 'tholes or pegs. The skin of the bull, 'or of the back of the cow, is too thick 'for this use; but of it they make horse-'whips, cutting them two or three feet 'long: at the handle they leave the full 'substance of the skin, and from thence 'cut it away tapering, but very even, 'and square all the four sides. While 'the thongs are green they twist them, 'and hang them to dry, which in a 'week's time become as hard as wood.'

one

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

one thing and then at another with an appearance of ſurprize; and would come ſo near the ſhip, that he might be touched with a pole; but would retire to a greater diſtance on obſerving any on board to ſtir. He frequently raiſed one third of his body above the water, ſtanding erect like a man, ſometimes for half an hour together; and then darting under the veſſel, appeared in the ſame poſture on the other ſide; and this he would repeat, perhaps thirty times together. At other times he would bring a great *American* ſea herb, which is flat and hollow below like the bottom of a bottle, and ſomething ſharp above: this he would toſs about and catch again with his mouth, playing a thouſand apiſh tricks with it. It has been obſerved of all ſea beaſts, that the more they play in fair weather the greater ſtorm is to be expected. 136

CHAP. IX.

Of FISHES.

THERE are great numbers of whales both in this ocean and in the *Penſchinſka* ſea; they frequently ſwim within muſket-ſhot of the ſhore, and ſometimes will come cloſe to the very ſhore, perhaps to rub off the ſhell-fiſh that adhere to their bodies and give them no reſt; as plainly appears from their lying a long time with their backs above water, to allow the rooks and gulls to pick them off. At ſuch time as the fiſh come out of the ſea into the freſh waters, two or three whales are often found together at the time of flood near the mouth of the rivers.

136 The whales here are from ſeven to fifteen fathoms long. We can give no account of the different ſpecies of whales at *Kamtſchatka*, few of them being caught here except in the northern parts by the *Koreki* and *Tchukotſkoi*, who feed upon their fleſh. In the year 1740 a whale was brought by the flood into the mouth of the *Bolſkoi* river; but ſome Coſſacks obſerving it, went out in boats, and cut it all to pieces; ſo that next day when I came, to my great diſappointment, I neither found fleſh nor bones; for theſe people, who had cut off the fleſh, being afraid of puniſhment for doing it without permiſſion, had buried the bones to conceal their crime. *Steller* obſerved that more whales were thrown on the eaſtern than on the weſtern ſhore, and more in the harveſt than in the ſpring.

225 The different people have different ways of catching them:
171 the *Kuriles* by throwing their poiſoned darts into them: the *Olutores* catch them in nets, made of thongs of the ſea horſe ſkin as broad as a man's hand, which they dry in the ſmoke. Theſe they ſet in the mouths of the rivers, and the whale purſuing other fiſh entangles himſelf in them. With theſe thongs he is dragged to the ſhore by the h[illegible] of numbers who aſſemble on theſe occaſions, and always p[illegible]rform certain ceremonies. They bring out of their common huts a wooden whale about two feet long; then building a new hut they place this image in it, uſing ſeveral conjurations. After this they light a lamp, and appointing ſome people to look after it, give orders that it be not allowed to go out from ſpring to harveſt, which is as long as the fiſhing ſeaſon laſts. They then cut the whale into different portions, which, looking upon it as their moſt delicate proviſion, they prepare in the following manner:---They dry the lean in the ſun; and the ſkin, which they ſeparate from the fat, they beat with hammers, and of it make ſoles to their ſhoes, which wears extremely well. They ſmoke the fat parts,

and

and cleaning the guts, they fill them with the oil which 171
runs in cutting the fish, or which they melt from the blubber, 225
having no other vessels to keep it in.

The *Tchukotskoi* kill whales with a harpoon in the same manner as the *Europeans* do, and they catch so many that they never eat those whales that are thrown dead on shore, as some of the neighbouring people do, but only extract their fat for burning. Although the *Tchukotskoi* have large herds of deer, which might be sufficient for their sustenance, yet they are the greatest whale fishers of any people in this part of the globe, and look upon the fat of the whales as the greatest delicacy; besides, having great scarcity of wood, they use it for burning. They make themselves shirts of the intestines of the whales, like the *Americans*; and use them for vessels, like the *Olutores*.

The kasatki, (falsely called the sword-fish) which are nu- 136
merous in these seas, are very useful to the inhabitants, for these 825
fish frequently either kill or drive the whales on shore. *Steller* had an opportunity of seeing an engagement between the kasatki and whale, both at sea and upon *Bering*'s island. When the kasatki attacks the whale he makes him roar so that he may be heard some miles. If the whale makes off, the kasatki follows him at some distance 'till great numbers of them gather together, and make a general attack. It is never observed that such whales as are thrown on shore have any part eaten out of their bodies; so that this war between the whales and the kasatki must proceed only from a natural enmity. The fishers are so much afraid of these animals that they not only never throw any darts at them, but if possible avoid going near them; nay, they even make offerings to them, begging that they will not hurt them: for if irritated they sometimes overturn their boats.

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 136 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

There is likewiſe another creature in theſe ſeas reſembling a whale, but ſmaller and ſlenderer: the *Ruſſians* call it a wolf, and the *Kamtſchadales*, chethak. Its fat is of ſuch a nature, that, when ſwallowed, it preſently paſſes inſenſibly. The natives ſometimes uſe it as a medicine in caſe of coſtiveneſs, but oftener to play tricks with one another. They feed upon the fleſh and tongue, which have not the ſame quality. 136 278 262 522

Notwithſtanding the great plenty of whales upon this coaſt, the ſcarcity of food is ſometimes ſo great, that whole villages die of hunger. In the month of *April*, 1739, I ſaw a melancholy inſtance of their being obliged, out of neceſſity, to eat ſome poiſonous whale's fat, at a village upon the river *Beroſover*, called *Alaune*, where I obſerved the people all look pale, as if they had been ſick for a long time; when I aſked the reaſon, I was told, that juſt before my arrival one of the natives was killed by eating of whale's fat; and as all the reſt had eat of the ſame, they dreaded the ſame fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the phyſicians there, faſtened him with ropes to a ladder, and placed themſelves on both ſides of him with great clubs in their hands, with which they toſſed firebrands out of the huts, and the wife of the ſick perſon coming behind him, made ſeveral conjurations over his head, begging death to ſpare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly ſurpriſe me; I rather wondered that ſuch things did not happen oftener, eſpecially from thoſe whales which are killed with poiſoned darts. However the *Kamtſchadales* think ſo little of the conſequences, that they had rather riſk their lives than be deprived of the pleaſure of eating whale's fat. 262 755 278

After the whales, we muſt mention the fiſh * mokoe, which at *Archangel* is called akula. It is about three fathoms long; 136

* Canis Carcharius Autoris.

brings

136 brings forth its young alive, like the whale; and when its mouth is ſhut has ſome reſemblance of a ſturgeon, but its teeth are very different, being large and terrible. The *Kamtſ-*
262 *chadales* eat the fleſh of this fiſh,[1] and though it appears to
825 be tough and ſtrong, they ſay it is exceedingly well taſted. The guts, and particularly the bladder, are in high eſteem; ſo that when they catch this fiſh, they never call it by its name, for fear, as they imagine, they ſhould provoke it to burſt its bladder, and render it uſeleſs to them. The teeth are ſold under the name of ſerpents' teeth.

136 Several fiſhes which are common to other ſeas are found here;
262 as pike, eels, lampreys, cod, and very fine ſoals in great plenty;
231 but the inhabitants make no account of theſe fiſh, and never uſe them unleſs in great neceſſity, or to feed their dogs. Mr. *Steller* obſerved four different ſpecies of flat fiſh.

There is a fiſh called * vahnae, which is a ſpecies of the cod; is round and thick, with three fins upon its back; and when taken out of the water is of a copper-colour, but preſently changes to yellow: its fleſh is white, but ſoft, and of a diſagreeable taſte; however the inhabitants eat more of it, than of other fiſh which are much better taſted; the reaſon indeed is, that they catch this fiſh in the beginning of the ſpring, when they can catch no other; a great deal of which they dry in the ſun uncleaned, deſigning it as proviſion for their dogs.

136 I ſaw the fiſh which they call † terpuk, but it being dry, I could not obſerve thoſe fine colours which Mr. *Steller* deſcribes. By his deſcription its back is blackiſh, its ſides are reddiſh, and chequered with fine ſilver-coloured ſpots; ſome of which are ſquare, and others circular: in its ſhape it reſembles the perch.

1. [Mokoe or Canis Carcharius Autorum]

* Onos vel Aſinus Antiquorum.

† Doecogrammos Stelleri.

They

They angle for this fish near the *Kurilski* islands, and the haven of *Awatscha*, with hooks made of bone or wood. 136

There are likewise several other kinds of fishes in these seas which are not very common in other places; but as they make no part of their nourishment, and are seldom caught, I shall take no notice of them, my design being only to mention such as serve for food to the inhabitants, in this country which produces no grain. The chief of these are salmon of different kinds, which during the summer come in shoals from the sea up the rivers. Of these they make what they call *eukol*, which they use instead of bread; and they boil up the fat, which serves for butter. They likewise make glue of them. 136 262 237

Before I give a particular description of each species apart, I would communicate some observations which regard the catching of these fish, and which indeed are wonderful proofs of the Divine Providence and the goodness of the Creator, who has blest a place with such abundance of fish where there is neither cattle nor grain. 136

In *Kamtschatka* the fish come from the sea in such numbers, that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink. At this time the bears and dogs catch more fish with their paws than people do at other places with their nets. All the fish that swim up the rivers are of the salmon kind, and are commonly called red fish; but the several sorts are so distinct from each other, that *Kamtschatka* alone is thought to produce as many different species as are to be found in all the world besides. Not one fish remains in *Kamtschatka* longer than six months (except gudgeons); for all that are not caught before the end of *December* die, except in some few deep places where there are warm springs. It is observed of all the different species of

136 of ſalmon in *Kamtſchatka*, that they are brought forth and die in the ſame river, come to their full growth in the ſea, and ſpawn only once during their whole lives: for which purpoſe they ſwim up the rivers, and having found a proper place in ſmooth water, they make a hole with the fins that are under their gills, and there depoſit their roes.

In *Siberia* the red fiſh live in clayey rivers; they remain there ſeveral years, and generate every year, having numbers of inſects proper for nouriſhment. They winter in deep pools, and in the ſpring ſwim further up for the ſake of propagating in the mouths of little rivulets that fall into the great rivers, where they are commonly caught. The young fry ſwim down to the ſea, where they continue 'till they come to their full growth, which Mr. *Steller* thinks is in the third year; and then they return in order to propagate. It is remarkable that thoſe fiſh which are bred in a great river continue in the ſea near to its mouth, feed upon things brought down by the ſtream, and when the time of ſpawning approaches they will enter no river but that which produced them. It is alſo very extraordinary, that thoſe fiſh which come up the rivers in the month of *Auguſt*, though they have time enough to ſpawn, yet as there remains but little time for their young to return, take a year-old fiſh of their own kind, which continually follows the male and female; and when the old have covered the roes they continue to aſcend, the young one, which is no bigger than a herring, guarding them 'till the month of *November*, at which time it returns with the other fiſhes. It is very probable that the ſame thing happens in *Europe*, which may have given occaſion, through the difference of their ages, to account them of different ſpecies.

Each kind of fiſh always aſcends the rivers at the ſame time. In the month of *Auguſt* ſometimes two, three, nay even four ſpecies come up at once; but each keeps ſeparate from the other.

The

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught. /136 825 805

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled. /136

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe. /136 226 262

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not /136

136 to be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn
262 about the thickness of sugar ropes; and the fishing begins about
576 the middle of *May*, and lasts six weeks. The *Kamtschadales*
574 esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about
136 the middle of *June*. The *eukol* that is made of it, though very
226 pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the floods appear at the mouths. The second is, that this fish is never plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into those rivers that communicate with the lakes. Here the inhabitants catch them by nets, darts, or other methods.

1. [chivatsi]

The

The third kind of this fish is called keta or kaeko; which is 136
somewhat larger than the narka. The flesh is white; the head 262
flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *eukol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas.

The gorbushe, or crook back, follows or sometimes accompanies 136
the keta. This fish is more plentiful than any other whatever; 262
it is about eighteen inches long, and flattish; its flesh is white; 231
its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs.

The last of these kinds that come on shore is called white fish. 136
This fish both in bulk and appearance is very like the keta; they 825
differ in this indeed, that the keta has no spots, and the white 226
fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have 136
spawned, they take all care to provide for their own safety, re- 226
tiring immediately to deep places where there are warm springs; and they are chiefly found in the springs near the *Bolscheretskoi* river

 and

136 and the *Opalskoy* lake: they are caught likewise during the whole
226 winter in those springs that run into the *Kamtschatka* from the south; and near to where the old lower fort of *Kamtschatka* stood they also abound, which is a great relief to the inhabitants. I myself was at this fishery in the end of *February*; however I found the fish at that time dryer and not so well tasted as in the harvest. This fish eats very well, either salted, dryed, or smoaked. It is caught frequently in the same net with the keta
227 and narka; and those which they use for this fishery are made of yarn about half as thick as that with which they make the nets for the chavitsi, and the meshes are about an inch and a half wide.

136 All these different species of fish change their colours, turn lean and ugly, their snout bends, their teeth grow, and a scurf appears upon their skins. The chavitsi, narka, and white fish, change their silver colour to a red; the keta turns likewise red, stained with black stripes. Their fins and tails become reddish and blackish; in one word, they would never be taken for the same fish that enter the rivers, if these changes were not certain. The gorbushe alone preserves its silver colour, and, whenever it loses that, it dies.

It is incredible with what eargerness they go up the rivers, particularly the gorbushe. When they come to any place where the stream is strong, and those that are weak find it impossible by their own strength to get up, they fasten their teeth upon the tail of some that are stronger, that they may be drawn up by them; so that several of these fish are found which have their tails bitten.

The true salmon may always be reckoned one of those fish that come in shoals; and are found to go up the rivers *Kompakfve*, *Bircumkin*, and *Etchi*. I never saw these fish indeed, but have heard a great deal of them. Mr. *Steller* writes, that when

when they return to the ſea, it ſometimes happens that they are driven by a ſtorm from the mouth of their native river, ſo that loſing their way, the following year they aſcend a ſtrange river, which is the occaſion of their being found in more plenty in ſome rivers one year than another. 136

There are other kinds of red fiſh which come up the river without any order, and live there the whole winter before they return. Mr. *Steller* ſays, they ſtay ſometimes four or five years. The firſt of this ſpecies is called, at *Ochotſka*, malma, and at *Kamtſchatka*, goltſa. When they come out of the ſea their colour is clear like ſilver; the upper part of the ſnout is blunt, and ſomewhat bent; the lower ſharp, and bent towards the upper. When they are ripped up, and the roes taken out, there appear upon the ſides round red ſpots of different magnitudes, the belly and lower fins become likewiſe reddiſh, except the bones which continue white.

The largeſt fiſh of this ſpecies, which lives ſometimes five or ſix years, comes from the ſea into the river *Kamtſchatka*, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almoſt as big as the chavitſi, though it ſeldom weighs more than twenty pounds. They are found likewiſe very large in the *Biſtroy* river; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour, have large teeth, and the lower jaw is crooked with a knob: it ſeems indeed of a different ſpecies. Theſe of three years old, which have been one year out of the ſea, have a long head, are of a ſilver colour, with ſmall ſcales, and ſmall red ſpots; and ſuch as have been two years out of the ſea are round and longiſh, with ſmall heads, and their fleſh, which is of a reddiſh white, is hard and well tafted. With regard to their ſize; the firſt year they are long and ſmall; the ſecond, they grow more in breadth than in length; the third, the head grows conſiderably; and the fourth, fifth, and ſixth years, their breadth and thickneſs increaſes

greatly

136 greatly: this obſervation probably holds in all kinds of ſalmon
226 trouts. In the fourth year alſo, the lower part to the ſnout be-
251 comes hooked. This ſpecies of fiſh[1] ſwims along with the gorbuſhe, and is caught with it in the ſame net, which is wove of ſmall yarn, the meſhes being about an inch wide. Such as live in the rivers are nouriſhed by the roes of other fiſh; and in the ſummer are found near the heads of ſmall rivers, which they leave in the ſpring. Such as are caught at the beginning of ſummer are ſalted, but thoſe caught later are frozen for the winter.

136 Another ſpecies of fiſh is called muikiſi, and is about the bigneſs of the narka; its ſcales are pretty large; its head is of a middling ſize; the upper part of its ſnout is like that of the goltſa, with the lower part hooked; it has teeth in its jaws and on the ſide of the tongue; its back is blackiſh, marked with round, or ſemicircular black ſpots; and upon each ſide has a large red ſtripe, which goes quite from the head to the tail: this diſtinguiſhes it from all the other ſpecies of this fiſh: it ſwallows all kinds of naſtineſs, and often catches the field mice that happen to ſwim upon the river; and is ſo particularly fond of the nortleberry, that if it ſees any growing upon the bank, it throws itſelf out, and ſeizes either the berry or the leaf of the plant. It is a well taſted fiſh, but is not caught in ſuch plenty as others are. They do not certainly know the time of its entering the rivers, but imagine it is before the ice is gone.

There is a third kind called kunſha, which is about three feet long; the head makes a ſeventh part of the length; the ſnout is ſhort and ſharp; its jaws are furniſhed with teeth; its back and ſides blackiſh, marked with yellow ſpots, ſome of which are round and others oblong; its belly is white; its lower fins and tail blue; and the fleſh white and well taſted. In *Ochotſka* it ſwims in ſhoals, but at *Kamtſchatka* it is more rare, and conſequently more eſteemed.

1. [Goltza]

The

The fourth ſpecies is the harius, which is well known in *Siberia* and all *Ruſſia*; but thoſe that are here have the back fin longer than the others. Mr. *Steller* writes, that they come up into the rivers upon the firſt going off of the ice; but I never happened to ſee this fiſh in *Kamtſchatka*. 136

There is another ſpecies of red fiſh which reſembles the golſta, with this difference, that its head is larger, and the upper part of the ſnout a little hooked; its ſides are marked with red ſpots, like the malma: it is ſeldom longer than 20 inches.

Among the ſmall fiſhes which the *Kamtſchadales* feed upon are three ſpecies of ſmelts; one of which is called hagatch, the ſecond innaka, and the third uiki. The hagatch is our common ſmelt. The innaka differs from it a little, and is found in great plenty about the lake *Nerpech*. Uiki is thrown ſometimes upon the ſhore in vaſt heaps for 100 verſts together. They are eaſily diſtinguiſhed from the other ſpecies by a rough ſtripe that goes down the ſide. They commonly ſwim three together, and are ſo joined by the afore-mentioned rough ſtripe, that when you catch one the others cannot eaſily diſengage themſelves. The *Kamtſchadales* dry this fiſh as food for their dogs; but in caſe of ſcarcity they uſe it themſelves, although the taſte is very diſagreeable 136 231 262

The laſt kind of fiſh which we ſhall mention is the herring: theſe are found in great plenty in the Eaſtern Sea, but very ſeldom in the bays which lie upon the *Penſchinſka*. In my opinion they don't differ in the leaſt from the herring which we have in Europe; which Mr. *Steller* likewiſe confirms. In the harveſt they are found in large lakes, where they breed and winter: in the ſpring they ſwim towards the ſea. The greateſt fiſhery of them is in the lake *Viliutchin*, which is only about fifty fathom from the ſea, and has communication with it by a ſmall outlet. When theſe herrings enter the lake, this paſſage is ſhut up by the ſand being thrown into it, and remains ſo 'till the month of 136 226

March,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 *March*, when it is washed away again by the high water arising
226 from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other forts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make less use of them than of roots and fishes:
433 the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

CLASS I. *Of the* SEA FOWLS.

The ſea fowls are found in greater plenty about the coaſt of the Eaſtern Ocean, than that of the *Penſchinſka* ſea; for the coaſt of the Eaſtern Ocean is more hilly and convenient for breeding. 136

The ipatka * is well known to all writers of natural hiſtory by the name of anas arctica, commonly called in *England* puffins. It is found upon the coaſt of *Kamtſchatka*, and the *Kuriſki* iſlands, and even upon the *Penſchinſka* bay, almoſt as far as *Ochotſka*. It is about the bigneſs of, or rather ſmaller than, a common duck; its head and neck are of a bluiſh black; the back is black; the belly and all below white; its bill red, and broad towards the root, but ſomewhat narrower towards the point; upon each ſide are three furrows; its legs are red, its feet webbed, and its nails ſmall, crooked, and black; its fleſh is hard; its eggs are like hen's eggs; it builds its neſt with graſs on the cliffs of the rocks. The *Kamtſchadales* and *Kuriles* wear the bills of theſe birds about their necks faſtened to ſtraps; and, according to their ſuperſtition, their ſhamans, or prieſts, muſt put them on with proper ceremony, to procure them good fortune. 777 825

Another ſpecies of theſe birds is called meuchagatka †, and in *Ochotſka*, igilma: this only differs from the former in being all black, and having two yellowiſh white tufts upon its head, which lie all along from its ears to its neck like locks of hair. To the beſt of my remembrance this bird has never yet been deſcribed. Mr. *Steller* and I ſent ſome of theſe ſpecies of birds to the Imperial Muſeum. Among thoſe ſent by Mr. *Steller* there was a third kind which is found upon the iſland *Bondena*, in *Angermannia*, and upon the *Caroline* iſlands; and is ſome- 136

* Alca roſtri ſulcis quatuor, oculorum regione temporibuſque albis. LINN. F. ſuec. v. 42.

† Alca monochros ſulcis tribus, cerro duplici utrinque dependente. Anas arctica cirrata. STELL.

136 what leſs than the other two; its colour is like that of the ipatka, except that its bill and legs are black, and that there are two white ſprigs upon its forehead, which reach from the eye to the bill.

The aru *, or kara, belongs to this claſs. It is larger than a duck; the head, neck, and back are black; the bill long, ſtrait, black, and ſharp; the legs black with a caſt of red; it has three black toes, and is web-footed. Great numbers of 237 theſe are found upon the rocky iſlands; and the inhabitants kill 262 them for the ſake of their fleſh, though tough and bad taſted; but more ſo for their ſkins, of which, as well as thoſe of other ſea fowls, they make themſelves garments. Their eggs are reckoned a great delicacy.

136 There are two kinds of tchaiki, or cormorants, found upon this coaſt, which are hardly obſerved any where elſe. They are about the bigneſs of a gooſe, have a ſtrait reddiſh bill about five inches long, and ſharp on the edges, and four noſtrils, ſuch as other cormorants have, two being near the forehead as are found in other birds which are thought to prognoſticate ſtorms, and are thence named Procellaria; their heads are of the middling ſize; their eyes black; their tails eight inches long; and their legs are covered with hair to the knees, but below them are bare; they have three toes of a bluiſh colour, and are web-footed; their wings extend more than a fathom; they are ſometimes ſpeckled; they appear often near the ſhore, but can't ſtand ſtrait upon dry ground, their feet being ſo near the tail that they are not able to balance their bodies: they fly ſlow even when hungry, but when full of meat they cannot raiſe themſelves from the ground; and, having eat too much, they eaſe their ſtomachs by throwing it 237 up; they have a wide throat, and ſwallow fiſh whole; their fleſh is very tough and ſinewy, therefore the natives ſeldom eat it, but in great neceſſity, killing them principally for the ſake of their

* Lomvia Hoieri.

bladders,

237 bladders, which they use instead of corks to their nets. The
223 way of catching them is singular, being angled for as fishes are, in the following manner: they fasten a thick iron, or wooden hook to a long rope or strap, baiting the hook with a whole fish, the point of which comes out near the back fin, and then throw it into the sea; this the cormorants observing gather about it in flocks, and quarrel among themselves who shall have the prize, until the strongest obtains it and swallows it; then being drawn on shore, they take out the hook and bait by putting their hands into its throat. Sometimes they fasten a live cormorant, which they call a decoy, to the rope, and that it may not swallow the bait, tie down its bill with a cord: the others seeing the decoy swim so near the shore, come with greater security to the bait. The *Kamtschadales* make needle-cases, and combs to comb their nettles, of the bones of their wings.

136 Besides the above-mentioned tchaiki, or cormorants, there is another species which haunt the rivers: these are called robbers, because they take the prey from the small birds; their tail is forked like that of the swallow.

136 The procellaria, or storm birds, are about the bigness of a
787 swallow; their feathers are all black, except the tops of their wings, which are white; their bill and legs black. They haunt about the islands, and before a storm they fly low and skim the sea, and sometimes into the ships, which the sailors look upon as the sign of an approaching violent gale.

136 The stariki *, or glupisha, belong to this species. The stariki are about the bigness of a pigeon; have bluish bills, and bluish black feathers about the nostrils, which look like bristles; the feathers of the head are of the same colour, interspersed here and there with white ones, which are longer and thinner than the rest; the upper part of the neck is black, but the lower black and

* Mergus marinus niger ventre albo, plumis angustis albis auritus. STELL.

136 white ſpeckled. The belly is white, the wings ſhort, the large feathers of which are black, and the reſt blue; the ſides and tail are black; the feet are red and webbed; and the nails black and ſmall: it 223 haunts about rocky iſlands, where it likewiſe builds its neſt: The *Kamtſchadales* catch theſe fowls eaſier than they do the tchaiki, or cormorants: they put on a fur-coat of a particular make, and letting their hands fall down, ſit down in a proper place, and wait for the evening; when the birds returning from the ſea ſeek to retire into holes for the night, and in the dark ſeveral of them fly into their furs, and are caught.

136 Among the birds deſcribed by Mr. *Steller* are the black ſtarikis *, whoſe bills are as red as vermillion, the right ſide of which is crooked; it has a white tuft upon its head. He ſaw a third ſpecies in *America*, which was ſpotted black and white.

The glupiſha are about the largeneſs of the common river cormorants; and are found upon the rocky iſlands, in high ſteep places; their colours are grey, white, and black; and are perhaps called glupiſha, that is, fooliſh, becauſe they frequently fly 237 into the boats. Mr. *Steller* ſays, that numbers of them are caught 223 in the fourth and fifth *Kuriſki* iſlands, which the inhabitants dry in the ſun; they ſqueeze the fat through the ſkin, which paſſes very 136 eaſily, and uſe it for burning. He likewiſe writes that all the rocky iſlands in the ſea between *Kamtſchatka* and *America* are covered with them. He has ſeen ſome as large as a gooſe, or an eagle; their bills are crooked and yellowiſh; their eyes are large like thoſe of an owl; they are black intermixed with white ſpots over the whole body. He once ſaw, 200 verſts from land, great numbers of them feeding upon a dead whale, which ſerved them alſo to appearance for lodging; and in his paſſage through the *Penſchinſka* ſea, he ſaw many of the glupiſha, ſome of which

* Mergulus maximus alter totus niger criſtatus, roſtro rubro. STELL.

were

were black, and others white; but none of them came so near the 136
vessel as to be exactly observed.

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone 136
foxes, who watch for them; they breed in the month of *July*; 222
their eggs are green, about the bigness of a hen's egg, and 223
being boiled thicken a little, but are ill tasted; however the *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these crea- 252
tures are so void of apprehension, that, though they see the 262
next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

* Columba Groenlandica Batavorum. Stell.

† Corvus aquaticus maximus cristatus periophtalmiis cinnaberinis, postea candidis. Stell.

much.

252 ſuch a manner that, as victuals are there, it is not bad; they
262 roaſt it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roaſted, they ſkin and eat it.

825 The natives ſay that theſe birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noiſe to the ſound of a trumpet.

136 CLASS II. *Of thoſe Birds which haunt for the moſt part about*
223 *the freſh Water.*

The firſt of this claſs is the ſwan, which is ſo common in *Kamtſchatka*, both in ſummer and winter, that the pooreſt perſon can have no entertainment without a ſwan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in thoſe rivers that do not freeze.

136 Here are ſeven kinds of geeſe, which are diſtinguiſhed thus: large grey geeſe, gumenniki, ſhort necks, grey and ſpeckled, white necks, ſmall white geeſe, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr: *Steller* ſays; who likewiſe writes, that they come from *America*, and that he himſelf ſaw them paſs *Bering*'s iſland in great flocks, flying eaſt in the harveſt and weſt in the ſpring. In *Kamtſchatka* are principally found the large grey geeſe, the gumenniki, and the grey and ſpeckled; the ſmall white gooſe is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vaſt numbers of them; and the beſt down
223 is brought to *Jakutſki* from theſe places. They catch them at the time they caſt their feathers, in the following manner:— They build huts with two doors, near thoſe places where they moſt commonly ſit at night. The fowler putting a white ſhirt on, above his cloaths, ſteals as near the flock as he can; and ſhewing himſelf

1 [Urile. Corvus aquaticus maximus Cristatus parioptalmiis Cinnaberinis, postea Candidis. Stell.]

himſelf he creeps away upon his hands and feet towards the 223
hut: then going through it, and obſerving that the geeſe have followed him, he ſhuts the door behind him, and running round he comes in at the other door, which ſhutting likewiſe, he encloſes all the geeſe.

Mr. *Steller* obſerved in the month of *July* upon *Bering's* 136
iſland an eighth kind of geeſe, about the bigneſs of the white ſpeckled Its back, neck, and belly were white; its wings black; its cheeks white, yet ſomewhat greeniſh; its eyes black, with a yellow ring; the bill has a black ſtripe round it, and is red, with a knob like the *Chineſe* or *Muſcovy* geeſe: this knob is bare and yellowiſh, except that along it there is a ſmall ſtripe of bluiſh black feathers. The natives report that this ſort of geeſe is likewiſe found upon the firſt *Kurilſkoy* iſland; however they were never obſerved upon the continent.

The people of *Kamtſchatka* have different methods of catching 223
geeſe when they caſt their feathers; ſometimes they purſue them in boats; ſometimes they hunt them with dogs; but moſt of them are caught in pits, which they dig near thoſe lakes where the geeſe haunt, and cover up carefully with graſs: theſe the geeſe coming upon the ſhore fall into, and are caught.

There are eleven different ſpecies of ducks in *Kamtſchatka*; 136
namely, the ſeleſni, ſharp tails, tcherneti, plutonoſi, ſvaſi, krohali, lutki, gogoli, tchirki, turpani, and ſtone ducks: of which the ſeleſni, tchirki, krohali, and gogoli, winter among the ſprings; all the reſt come in the ſpring, and fly away in harveſt, as the geeſe do.

The ſharp tails are of that kind which writers call the *anas caudacuta, ſive havelda iſlandica*. They haunt in the bays of the ſea, or about the mouths of great rivers: they ſwim in flocks, and with their cry, which is extraordinary, make no diſagreeable muſick. Mr. *Steller* writes, that the larynx, or lower part of their throat, has three openings, covered with thin

136 thin membranes. The natives call this fowl aangitch, from their manner of crying.

The turpan is called by writers the black duck *. They are not so numerous about *Kamtschatka* as at *Ochotska*, where they are caught in great plenty about the equinox. Fifty or more of the natives here going out in boats surround a whole flock, which in time of the flood they drive into the mouth of the river *Ochotska*; and so soon as it begins to ebb, and the water in the bay turns low, all the inhabitants fall upon them, and kill them with clubs in such numbers, that every one gets 20 or 30 for his share.

The stone ducks † have not hitherto been observed in any other place; they breed in the summer time in the rivers. The drakes are particularly beautiful, their head being like black velvet, and having two white spots upon their nose, which extend beyond the eyes, and end in a clay-coloured stripe behind their head: there is a small white spot near each ear; their bills are broad and flat, like those of other ducks; they are of a bluish colour, and their necks of a bluish black; upon their breasts are black feathers with a white border below; the feathers are smaller and broader above; the fore part of the back and belly are bluish, but more blackish towards the tail; across both wings are broad white stripes with black borders; their sides, under the wings, are of a clay colour; the large feathers of the wings, except six, bluish; these are black and roughish like velvet; the two last are white with black borders, and the second row of the large wing feathers are all black, the third grey, two only of these feathers having white spots upon their ends: their tails are sharp, and their feet pale coloured: they weigh about two pounds. The female is far from being so beautiful: her feathers are black, each

* Anas niger. WILLOUGHBY.

† Anas picta capite pulchre fasciato. STELLER.

being

being ſomewhat yellowiſh at the end, with a ſmall white ſtripe; 136
the head is black, and upon its temples are ſmall white ſpots: it weighs about a pound and a half.

In the harveſt the females are found in the rivers, but none of the drakes: they are very ſtupid and eaſily caught where the waters are clear and ſhallow, for they do not fly away at the ſight of a man, but only dive, and therefore may be eaſily killed with poles, as I myſelf have frequently done. Mr. *Steller* ſaw ſeveral of this kind of ducks in the *American* iſlands.

They catch the ducks with nets in the following manner: 223
in a wood that happens to ſtand between two lakes, or between a lake and a river, they cut a ſtrait paſſage, through which the ducks fly during the ſummer; here in the harveſt, when the fiſhery is over, the natives faſten to long poles ſeveral nets, which in the evenings they raiſe as high as the ducks are uſed to mount: round the nets a ſtring is drawn, by which they can reef them together, as ſoon as they find the ducks entangled; but they ſometimes fly with ſuch force and in ſuch numbers, that they break through. They likewiſe catch them in ſmall rivers with nets ſtretched acroſs the ſtream: but this is a method not peculiar to *Kamtſchatka*.

To this claſs belongs likewiſe the gagari, or columbus, of 136
which there are four ſpecies *, three of which are large, and 825
the other ſmall: the firſt of the largeſt has a tail; the ſecond 787
a clay coloured ſpot upon its neck, a little above the crop: the third is called by *Wormius*, the northern lumme; and *Marſilius* calls the fourth the little lumme. The natives pretend to foretel the change of weather by their crying and flying; for they think that the wind muſt always blow from that point towards which they fly: however they are frequently deceived in their judgment.

* 1. Colymbus maximus. Gesn. Stell. 2. Colymbus arcticus lumme dictus. Worm. 3. Colymbus macula ſub mente caſtanea. Stell. 4. Colymbus ſive pedicipes cinereus. *Ejuſdem.*

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136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tunguſi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkowoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kuriſki* languages.

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A LIST *of some* PLANTS, BEASTS, FISHES, *and* BIRDS; *with their Names in the* English, Russian, Kamtschatka, Koratski, *and* Kurilski *Languages.* 136 137

PLANTS.

English	*Russian*	*Kamtschatka*	*Koratski*	*Kurilski*
The birch tree	Berefnick	Hehy	Lugune	
Poplar	Tupflucke	Thilpiai	Yakul	
Willow	Vetelnicke	Liumtche	Tekile	
Alder	Olchofnike	Sikine	Nikilieu	Affe
Service tree	Rebenike	Kaihine	Eloene	Koruoni
Juniper	Moftevelnike	Kahaine	Valvakitche	Pakæpairumamai
Cherry laurel	Tchelemafnike	Kalhame	Eloene	
Dog brier	Shipovnike	Kavafhe	Pitctakachatche	Kopokone
Honeysuckle	Shimflode	Lufhinike	Nitchivoy	Enumetam
Barberries	Boisrifhnike	Horatenune	Pitkitche	
Brambleberries	Morafhka	Shiie	Etiette	Apuumenipe
Wortleberries	Golubitfa	Ningule	Liugule	Enumucuta
Cranberries	Klinkva	Tchikume	Emelkevina	Afitte
Bulberries	Briufnitou	Tchahauhe	Tiunaane	Nipopkipe

BEASTS.

Sea calves	Tiulenne	Kolha	Memele	Retafore
Sea beaver	Babri	Kaiku	Kalaga	Rahku
Sea cat	Ketti	Tatlatche	Tatatche	Ounepe
A fox	Lifotfa	Tchafhiai	Yaivne	Kimutpe
Sables	Cobali	Kemhime	Kitighime	Na
Ermines	Gorsoflai	Doitchitche	Imahuhaka	Taanerume
A wolf	Volka	Kitaia	Eglinguue	Orgia
Bear	Medved	Kafha	Kainga	
Glutton	Raffamak	Timmi	Haeppi	These beasts are not known in the Kurilski islands
Marmotta	Evrafhka	Cired3tche	Gilnak	
Elk	Oleni	Eluahappe	Lugaki	
Stone ram	Kammenoi barenu	Guadinadatche	Kitipe	

FISHES.

A large kind of salmon	Tchavitche	Tchovnitche	Evetche	Tchivira
Red fish	Krafhnoiriha	Kehivifhe	Niovoai	Siitchine
The humpback	Gorbufhe	Kosnautchi	Kalal	Siakipa
Turbot	Kambala	Sigifigh	Alpa	Tantaka
Lampreys	Minoghi	Kanaganfhe	Unknown	Unknown
Smelts	Korouchi	Innahu		
Herring	Seldi	Neriner		
Skate	Skata	Kopafhu	Kammiahacke	Kapafhu
Cod fish	Frefka	Battui	Unknown	Unknown
Whales	Kili	Dai	Junghi	Rika

BIRDS.

Great sea cormorant	Bolofhoi tchaika	Atuma	Attume	Pangapiphe
Swan	Lebed	Matame	Kamtchan	
Geese	Goufled	Kfude	Gecloaine	Kuntape
A drake	Celefna	Baine	Geftchogatche	Bakariku
Stone ducks	Kammenia utki	Nikingike	Unknown	Vaiout
Widgeons	Gargari, Afhosi	Yovaiva		Cefle
Eagles	Orli	Selche	Tilmiti	Surgear
Hawkes	Saholi	Shifhi	Tilmitil	
Partridges	Kuropatki	Euihtchitche	Euette	Niepue
Crows	Voronni	Kaka	Tchautchavaola yelle	Pafkure
Magpies	Saroki	Nahitchectche	Unkitigin	Kakuk
Ravens	Voronitchezni	Hagulhak	Nimetta yelle	
Swallows	Lafletchki	Kaiukutche	Kavalingek	Kuahan
Larks	Javoronki	Tchelaalai	Geatcheiere	Rikintchire
Cuckows	Kokafhke	Koakoutchitche	Kaikuke	Kahkok
Snipes	Kuliki	Soakulutche	Tcheiaa	Etchikumama

Of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

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AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatki* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

Nothing plagues the
natives in their huts ſo much as the lice and fleas; the 136
women ſuffer moſt from the former; by wearing very long, 515
and ſometimes falſe hair. Mr. *Steller* was told, that near the 302
ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them.

It is remarkable that in *Kamtſchatka* there are neither frogs, 136
toads, nor ſerpents. Lizards, indeed, are numerous enough, which 825
the natives look upon as ſpies ſent from the infernal powers for 787
information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others.

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

133 do not happen at fixed times, but according to the age of the moon, as I obſerved in the *Penſchinſka* ſea; and if this general opinion be true, that the ebbs and floods in other ſeas are equal, and at fixed hours, then the *Kamtſchatkoi* ſea reſembles only the White Sea, where I am told that there is one high ſpring and one low flood in the ſame day. The laſt the natives call *maniha*; therefore I thought it proper carefully to relate the difference of the tides here, both with regard to the high water and the maniha: for the better underſtanding of which in the original is ſubjoined a long journal, which was kept for three months, and likewiſe the journal of Captain *Elagine*, which was taken at the mouth of the river *Ochotſka*, the *Kuriſki* iſlands, and the haven of *Petropaulauſkay*; which we omit, as it would only be a uſeleſs burthen to the *Engliſh* reader.

Now, in order to be the more intelligible, I muſt obſerve, that the ſea water which flows into the bays does not always run intirely back, but only according to the age of the moon; ſo that ſometimes in the time of ebb nothing remains but the water of the river which is within its own banks, at other times theſe banks are all overflowed with water. All the ſea water runs out about the full and new moon, when the flood follows immediately upon the ebb, and it riſes near eight feet. The flood continues about eight hours, and then it begins to ebb, which continues ſix hours; after which it flows again for three hours, the water not riſing quite a foot; at laſt the ebb begins, which continues ſeven hours, and all the ſea water runs out In this manner are the floods and ebbs regulated for three days after the full and new moon; at the end of which the time of the flowing and ebbing, and height of the flood and ebb, is leſs, the maniha greater, the ſea water which was before ſaid to run all out now remains in ſome part, and as the moon approaches the quadratures, the large tides grow leſs and the maniha greater; ſo that after the ebb of the maniha the greater quantity of water remains ſtill in the bays, and at laſt, at

at the quarter moons, what were the high tides change into the maniha, and the maniha into them. I reckon the change of the high tide into the maniha, and of the maniha into the high tide, from the time when one tide begins at midday and the other at midnight; or when it begins to flow or ebb at ſix hours in the morning and ſix in the afternoon. 133

I ſhall likewiſe communicate the methods that I followed in my obſervations: In the mouth of a river I placed a ſtake, divided into feet and inches of the *Paris* meaſure; the loweſt mark was at the height of the river water in the time of the ebb at the new and full moon. This ſtake I fixed without great trouble, but am obliged to own that I was not able to aſcertain exactly the height of the water in the flood, becauſe it always comes in ſurges, which renders the ſtake wet ſomewhat higher than the true depth; nor can I certainly determine whether the water continues at the ſame height, or not, for any certain time.

THE

OF THE

NATIVES of *Kamtſchatka*,

AND THEIR

CUSTOMS *and* MANNERS.

PART III.

CHAP. I.

105 *Of the* NATIVES *of* Kamtſchatka *in general.*

THE natives of *Kamtſchatka* are as wild as the country itſelf. Some of them have no fixed habitations, but wander from place to place with their herds of rein-deer; others have ſettled habitations, and reſide upon the banks of the rivers and the ſhore of the *Penſchinſka* ſea, living upon fiſh and ſea animals, and ſuch herbs as grow upon the ſhore: the former dwell in huts covered with deer-ſkins, the latter in places dug out of the earth; both in a very barbarous manner: their diſpoſitions and tempers are rough; and they are intirely ignorant of letters or religion.

101 The natives are divided into three different people, namely, the
131 *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 The *Kamtſchadales* may be divided into the northern and
184 ſouthern; the northern people, who live along the river *Kamtſ-*
197 *chatka* on the coaſt of the Eaſtern Ocean as far as the mouth of
171 the river *Ukoi*, and ſouthward to the mouth of the river *Nala-cheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 Some likewiſe divide the *Kuriles* into two different nations or
177 tribes, calling one the diſtant and the other the nearer *Kuriles*.
184 By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

both in their language and cuſtoms, yet we have reaſon to believe 101
they are the ſame people; the difference only ariſing from their 177
neighbourhood, and intermarriages with the true *Kuriles*. 184

The *Kamtſchadales* have this particular cuſtom, that they endeavour to give every thing a name in their language which may 192
expreſs the property of it; but if they don't underſtand the thing quite well themſelves, then they take a name from ſome foreign language, which perhaps has no relation to the thing itſelf; as, for example, they call a prieſt *Bogbog*, becauſe probably they hear him uſe the word *Bogbog*, God; bread they call *Brightatin Augſh*, that is, *Ruſſian* root; and thus of ſeveral other words to which their language is a ſtranger.

The names which the *Ruſſians* give theſe different nations they 161
did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtſchadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language ſignifies a rein-deer; and that the *Ruſſian* Coſſacks frequently hearing the word *Kora*, or obſerving that their whole riches conſiſted in rein-deer, gave them the name of *Koreki*.

The inhabitants of *Kamtſchatka* have three languages, that 197
of the *Kamtſchadales*, the *Koreki*, and *Kuriles*; each of which is 177
divided into different dialects. The *Kamtſchatka* language has three principal dialects: the firſt is uſed by the northern, the ſecond by the ſouthern, which differ ſo much that one may look upon them as different languages; however they can underſtand one another without any interpreter: the third dialect is that which is ſpoken by thoſe who live upon the *Penſchinſka* ſea, between the rivers *Vorovſkaya* and *Tegbil*, which is compoſed of both the above-mentioned dialects and ſome words taken from the *Koreki*.

000 The language of the *Koreki* consists of two dialects; one of which is spoken by the rein-deer *Koreki*, and the other by the fixed. We are not, indeed, certain what other dialects may be amongst them, being well acquainted only with those who are subject to the *Russians*; but it is probable that those who are 191 scattered among the islands may have some difference in their way of speaking. The *Kamtschatka* language is spoken half in the throat and half in the mouth: the pronunciation is slow and difficult, and seems to indicate a timorous, slavish, and deceitful people; as in fact they are.

The *Koreki* speak aloud, and in a screaming tone; their words are long, but their sentences short, and their words generally begin with two vowels, and end with one or two more: as for example, uemkai, a rein-deer which has not been driven.

The *Kuriles* speak slow, distinctly, and agreeably: their words are middling, the vowels and consonants being justly mixed: and of all these wild people the *Kuriles* are the best, being honest, constant, civil, and hospitable.

CHAP. II.

161 *Some Conjectures concerning the Names of the* Kamtschadales, *and the other Inhabitants of* Kamtschatka.

SOME assert, that the *Kamtschadales* were so named by the *Russians* from the river *Kamtschatka*, but it was called so before the *Russians* had discovered it, and had its name from a chieftain, called *Konchata*.

We cannot find likewise why the *Koreki* call the *Kamtschadales*, *Kontchalo*, nor can they give any reasons for it themselves.

The

The *Kamtſchadales*, beſides the general name *Itelmen*, diſtinguiſh themſelves by adding the name of the river, or remarkable place where they live, as *Kikſha-ai*, an inhabitant upon the Great River; *Suatchu-ai*, an inhabitant upon the river *Awatſcha*; for the word *ai* being added to any river or remarkable ſituation, denotes inhabitant of that place, as the word *Itelmen* is the general name for inhabitant. Thoſe who think *Konchata* to have been a great captain, ſeem to have applied to him only all the brave actions which ought to be attributed to the ſeveral inhabitants upon the river *Elouki*, who are called *Koatche-ai*, or, in the common way of ſpeaking, *Kontchat*: beſides, this being a received opinion, that the inhabitants of the river *Elouki* are the braveſt of all the *Kamtſchadales*, the *Koreki*, who are their neighbours, might eaſily call the whole nation *Kamtſchadales* from their name *Koatche-ai*; and it is nothing extraordinary to find the word *Koatche-ai* changed into *Kontchala*, and *Kontchala* into *Kamtſchadale*, as we find ſeveral ſimilar examples, not only among theſe barbarous people, but the politeſt nations of *Europe*. 101

With regard to the place where the *Kamtſchadales* came from, or at what time they firſt ſettled here, we can have no certain account; for all that can be obtained from theſe people is only fabulous tradition; and they pretend that they were created upon this very ſpot, and ſay, their firſt anceſtor was *Kutbu*, who formerly lived in the heavens: however by their manners, cuſtoms, language, dreſs, and other circumſtances, it would appear that the *Kamtſchadales* came over from *Mungalia*. Of the antiquity of theſe people *Steller* gives the following proofs: 1*ſt*. that they have loſt every tradition of their origin. 2*d*. That before the arrival the *Ruſſians*, they knew little of any other people, except the *Koreki* and *Tchukotſkoi*; and it is but lately that they came to any knowledge of the *Kuriles* and *Japaneſe*, and this was owing to the arrival of the latter among 174

174 among them to trade, from a *Japanese* boat having been cast away upon their coast. 3*d*. That these people are extremely numerous notwithstanding so many are destroyed every year by wild beasts, *&c*. 4*th*. From their great knowledge of the virtues and uses of the natural produce of the country, which cannot be attained in a short time, not to mention that they have no more than four months in the year left for this enquiry, and great part of those too they must employ in fishing and making provisions for winter. 5*th*. All their instruments and houshold furniture are different from those of other nations, and their necessities seem to have directed the invention of most of them. 6*th*. That their uncultivated state of nature and passions seem to differ very little from that of the brute beasts, pleasures being their only pursuit, having no idea of futurity.

The following reasons incline us to think that they take their origin from the *Mungals*, not from the *Tartars* who live upon the river *Amur*, nor from the *Kuriles* or *Japanese*; for if they had sprung from the *Tartars* it is probable they would have settled about the river *Lena*, where the *Jakutski* and *Tungusi* live at present, these places being formerly uninhabited, and much more fruitful than *Kamtschatka*; nor can we imagine that they were driven thence by the *Jakutski*; the difference of their manners, and make of their bodies from the *Kuriles* is such that we cannot believe they sprung from them; and that their origin should be *Japanese* appears improbable, because their settlement must have been prior to the separation of the *Japanese* from the empire of *China*; and that they were settled there long before the *Japanese* fixed in these islands in the sea of *Kamtschatka* appears from their not knowing the use of iron, or iron ore, though it is above two thousand years since the *Mungals* made their arms and other instruments of iron, and the other *Tartars* knives and daggers of copper; therefore it is probable that the *Kamtschadales* were driven hither by the tyranny

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ranny of the Eastern conquerors, as the *Lopari*, *Ostiaks*, and *Samojeds* were driven to the extremities of the North by the encroachments of other *European* nations. If *Kamtschatka* had not been inhabited before the *Tungusi* had got a settlement, it is probable they would have fixed here, as being safer from the dangers of any sudden attacks of their enemies. 174

Thus it appears likely, that the *Kamtschadales* lived formerly in *Mungalia* beyond the river *Amur*, and made one people with the *Mungals*, which is farther confirmed by the following observations, such as the *Kamtschadales* having several words common to the *Mungal Chinese* language, as their terminations in *ong*, *ing*, *oang*, *chin*, *cha*, *ching*, *ksi*, *ksung*; it would be still a greater proof if we could show several words and sentences the same in both languages; but not to insist only upon the language, the *Kamtschadales* and *Mungals* are both of a small stature, are swarthy, have black hair, a broad face, a sharp nose, with the eyes falling in, eyebrows small and thin, a hanging belly, slender legs and arms; they are both remarkable for cowardice, boasting, and slavishness to people who use them hard, and for their obstinacy and contempt of those who treat them with gentleness.

CHAP. III

Of the ANCIENT STATE *of the Natives of* Kamtschatka. 175 622 554

BEFORE the *Russian* conquest they lived in perfect freedom, having no chief, being subject to no law, nor paying any taxes; the old men, or those who were remarkable for their bravery, bearing the principal authority in their villages, though none had any right to command or inflict punishment.

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the same dish with the dogs, which they never wash; every thing
264 about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

962 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing, dancing, and relating of love stories Their greatest unhappiness
554 or trouble is the want of these amusements: they shun this by all
157 methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 589
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and miſfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

802 without their fingers they do not tell three. It is very diverting to ſee them reckon more than ten; for having reckoned the fingers of both hands they claſp them together, which ſignifies ten; then they begin with their toes, and count to twenty; after which they are quite confounded, and cry, *Matcha?* that is, Where ſhall
805 I take more. They reckon ten months in the year, ſome of which are longer and ſome ſhorter; for they do not divide them by the changes of the moon, but by the order of particular occurrences that happen in thoſe regions, as may be ſeen in the following table:

1ſt. Purifier of ſins; for in this month they have a holiday for the purification of all their ſins.
2d. Breaker of hatchets, from the great froſt.
3d. Beginning of heat.
4th. Time of the long day.
5th. Preparing month.
6th. Red fiſh month.
7th. White fiſh month.
8th. Kaiko fiſh month.
9th. Great white fiſh month.
10th. Leaf falling month.

This laſt month continues to the month of *November*, or that of the purification, and it is the length of almoſt three months; however, theſe names of the months are not the ſame every where, but are only proper to the inhabitants upon the river *Kamtſchatka*: the inhabitants of the northern parts give them different names, ſuch as,

1ſt. The month of the rivers' freezing
2d. Hunting month.
3d. Purifier of ſins.
4th. Breaker of hatchets, from the great froſt.
5th. Time of the long day.
6th. Sea beavers' puppying time

7th. Sea

7th. Sea calves' puppying time. 805

8th. Time when the tame deer bring forth their young.

9th. When the wild deer bring forth.

10th. Beginning of the fishery.

Their division of time is pretty singular; they commonly divide our year into two, so that winter is one year, and summer another: the summer year begins in *May*, and the winter in *November*.

They do not distinguish the days by any particular appellation, nor form them into weeks or months, nor yet know how many days are in the month or year. They mark their epochs by some remarkable thing or other, such as the arrival of the *Russians*, the great rebellion, or the first expedition to *Kamtschatka*. They 212 have no writings, nor hieroglyphick figures, to preserve the memory of any thing; so that all their knowledge depends upon tradition, which soon becomes uncertain and fabulous in regard to what is long past.

They are ignorant of the causes of eclipses, but when they 821 happen, they carry fire out of their huts, and pray the luminary eclipsed to shine as formerly. They know only three constellations; the Great Bear, the Pleiades, and the three stars in Orion; and give names only to the principal winds.

Their laws in general tend to give satisfaction to the injured 681 person. If any one kills another, he is to be killed by the rela- 754 tions of the person slain. They burn the hands of people who have been frequently caught in theft, but for the first offence the thief must restore what he hath stolen, and live alone in solitude, without expecting any assistance from others. They think they can punish an undiscovered theft by burning the sinews of the stone-buck in a publick meeting with great ceremonies of conjuration, believing that as these sinews are contracted by the fire so the thief will have all his limbs contracted.

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578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 Although their manner of living be most nasty, and their
177 actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 In every *Ostrog*, or large village, by order of her Imperial
794 Majesty, is appointed a chief who is sole judge in all causes, ex-
871 cept those of life and death; and not only these chiefs, but even
R the common people, have their chapels for publick worship.
177 Schools are also erected in almost every village to which the
62 *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

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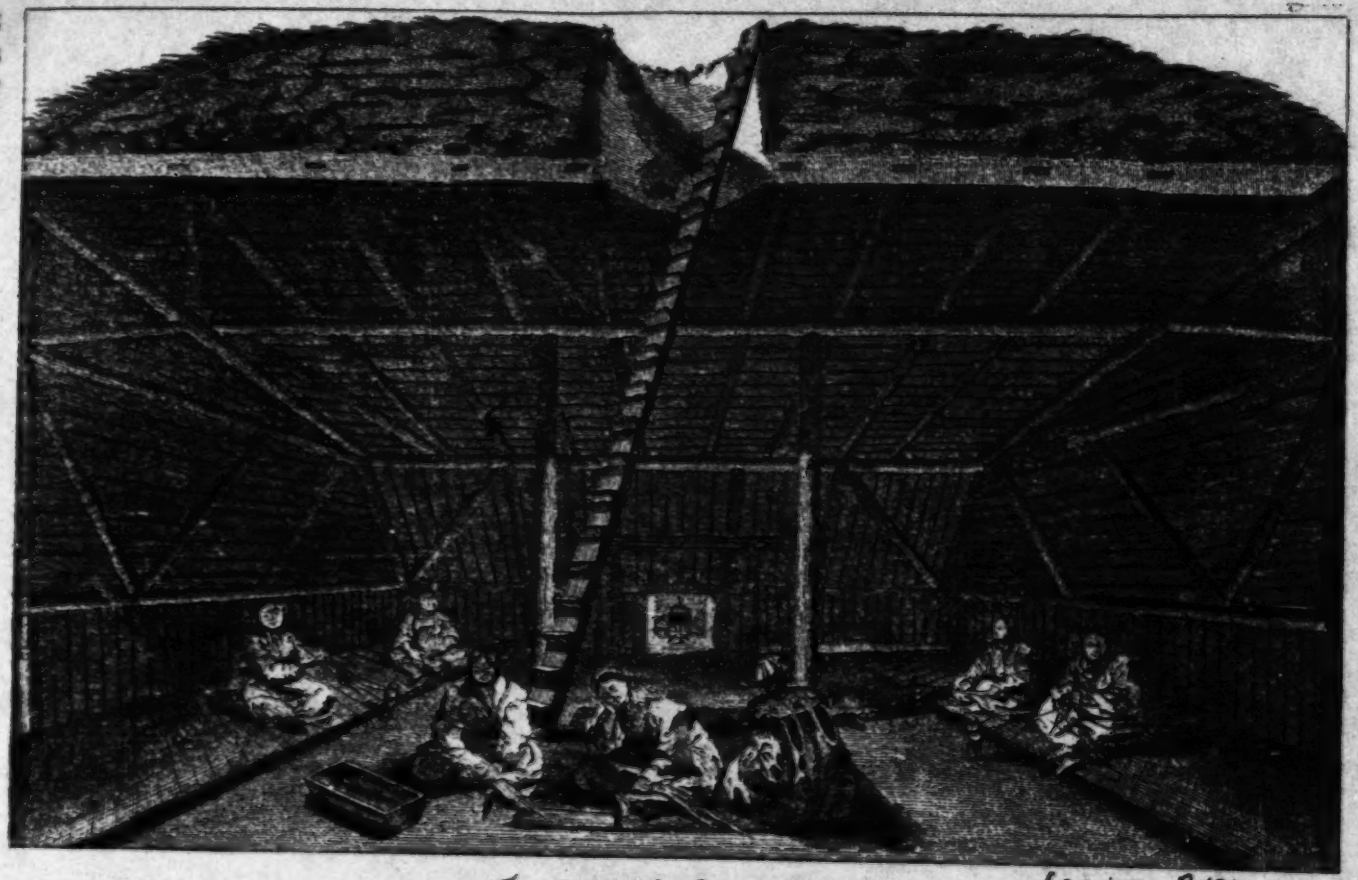
283
417



The Inside of a Winter Hut

facing R 181

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CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtſchadales. 361

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a 342
hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-place is in one of the long ſides of the ſquare: between the 352
pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs.

They enter their huts by ladders commonly placed near the 342
fire hearth, ſo that when they are heating their huts the ſteps 417
of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 626

to

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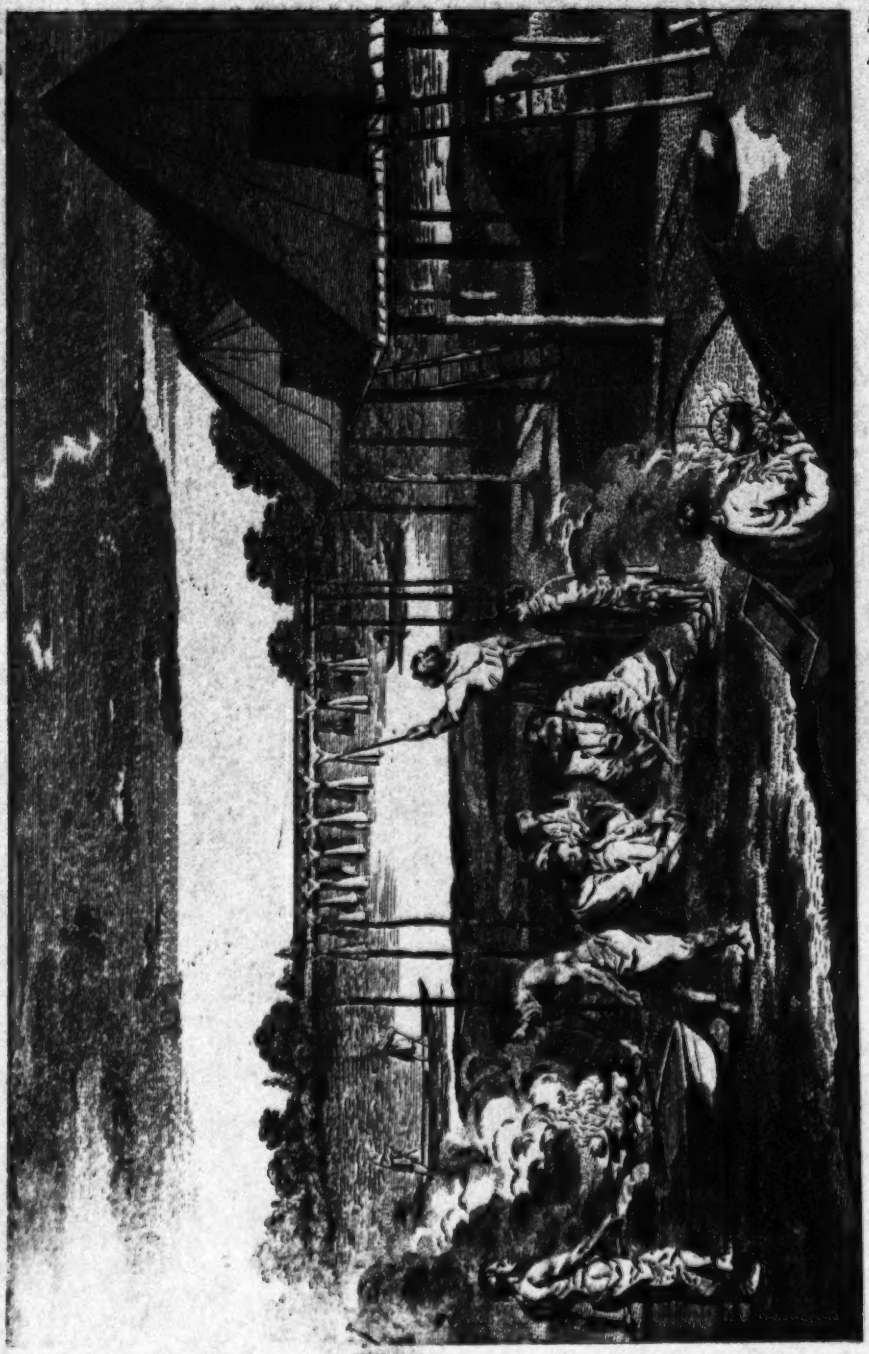

Summer Huts.

facing p. 182

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342 to ſuffocate any one who is not inured to bear it: but the
417 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 tions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpecially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

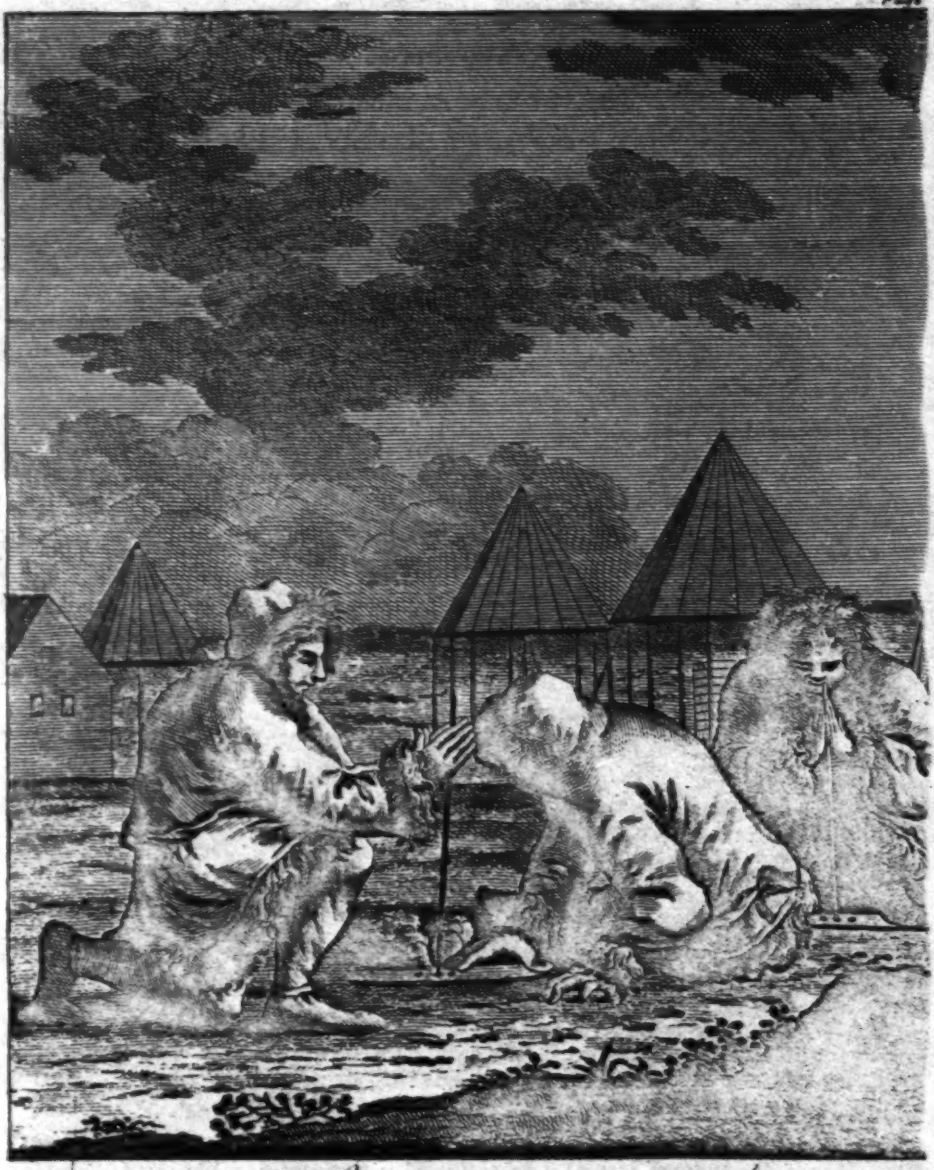
343 their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which
361 are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

779 They look upon that river near which their village is situated,
621 as the inheritance of their tribe; and if one or two families at
403 any time desire to live separate from their native village, they build themselves huts upon the same river, or some branch that
614 falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

372



Method of producing Fire

opposite p. 184

CHAP. V.

415 325 *Of their* HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 501 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into a

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
445 they are ingenious enough to make ſpears and arrows out of the iron pots and kettles which they buy; and they are ſo dextrous
R. 177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
439 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
177 japanned waiter, and silver ear-rings, which could be brought from no other place.

321 Of all the curiosities made by these wild people with their stone
531 knives and hatchets, nothing surprised me so much as a chain of whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtabta*, and the other *tabta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tabta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtabta only upon the river *Kamtschatka*, but the tabta in most other places. When any planks are sewed upon the tabta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

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the ſettled *Koreki* and *Tchukotſkoi*, for want of proper timber and plank, make their baidars of the ſkins of ſea animals. 171 501

Theſe boats hold two perſons, one of which ſits in the prow and the other in the ſtern. They puſh them againſt the ſtream with poles, which is attended with great trouble: when the current is ſtrong they can ſcarcely advance two feet in ten minutes; notwithſtanding which, they will carry theſe boats full loaded ſometimes 20 verſts, and, when the ſtream is not very ſtrong, even 30 or 40 verſts.

In the larger boats they can carry 30 or 40 pood; and when the goods are not very heavy, they lay them upon a float or bridge made between two boats joined together. They uſe this method in tranſporting their proviſions down with the ſtream, and alſo to and from the iſlands.

CHAP. VI.

Of the LABOUR *appropriated to the* DIFFERENT SEXES. 221 462

IN the ſummer-time the men are employed in catching, drying, and tranſporting fiſh to their habitations; in preparing bones and ſour fiſh to feed their dogs: the women, in cleaning the fiſh, and ſpreading it out to dry; and ſometimes they go a fiſhing with their huſbands. After their fiſhing is over, they gather in the herbs, roots, and berries, both for food and medicine.

In the harveſt the men catch the fiſh that appear at that time, and kill fowl, ſuch as geeſe, ducks, ſwans, and the like; they teach their dogs to draw carriages, and prepare wood for their

221 ſledges, and other uſes. The women at this time are buſy with
462 their hemp of nettles, in pulling it up, watering, breaking, peeling, and laying it up in their balagans.

The men in the winter hunt for ſables and foxes, weave fiſhing nets, make ſledges, fetch wood, and bring their proviſions from ſeveral places, which they had prepared in the ſummer, and could not bring home in the harveſt. The women are principally employed in ſpinning thread for nets.

In the ſpring, when the rivers begin to thaw, the fiſh that wintered in them go towards the ſea; and the men are buſied in catching them or the ſea animals that at this time frequent the bays. The people upon the Eaſtern Ocean catch the ſea beaver.
462 All the women go into the fields, where they gather wild garlick,
221 and other young tender herbs, which they uſe not only in a ſcar-
262 city of other proviſion, which often happens at this ſeaſon of the year, but likewiſe out of luxury; for ſo fond are they of every thing that is green, that during the whole ſpring they are ſeldom without having ſome of it in their mouths; and though they always bring home a great bundle of greens, they ſeldom laſt them above a day.

462 Beſides the above-mentioned employments the men are obliged to build their huts and balagans, to heat their huts, dreſs victuals, feed their dogs, flea the animals, whoſe ſkins are uſed in cloathing, and provide all houſhold and warlike inſtruments: the women are here the only taylors and ſhoemakers, for they dreſs the ſkins, make the cloaths, ſhoes, and ſtockings: it is even a diſgrace for the men to do any thing of that ſort; ſo that they looked upon the *Ruſſians* who came here firſt in a very ridiculous light, when they ſaw them uſe either their needle or awl. The women are likewiſe employed in dying ſkins, in conjuration, and
281 curing of the ſick. Their method of preparing and dying ſkins, ſewing and joining them, is as follows: every ſkin which they uſe

use for cloaths, such as deer-skins, seals, dogs, and beavers, they 281
prepare one way: in the first place, wetting and spreading it out, they scrape off all the pieces of fat or veins that remained after fleaing it, with stones fixed in pieces of wood; then rubbing it over with fresh or sour caviar, they roll it up and tread it with their feet 'till the hide begins to stink; they again scrape and clean it, and continue this 'till the skin is soft and clean. Such skins as they want to prepare without the hair they use at first in the same manner as above; then hang them in the smoke for a week, and afterwards soak them in warm water to make the hair fall off; at last rubbing them with caviar, by frequent treading and scraping them with stones, they make them clean and soft.

They dye the deer and dog skins, which they use for cloathing, 281
with alder bark cut and rubbed very small; but the seal-skins, 386
which they use either for cloathing, shoes, or straps for binding their sledges, they dye in a particular manner: having first cleaned off the hair they make a bag of the skin, and turning the hair side outward they pour into it a strong decoction of alder bark; after it has lain thus sometime, they hang it upon a tree, and beat it with a stick. This operation they repeat 'till the colour is gone quite through the skin; then they rip it open, and stretching it out, dry it in the air; at last they rub it 'till it becomes soft and fit for use. Such skins are not unlike dressed goat-skins: however, *Steller* says that the *Lamuschki* have yet a better way of preparing them. These skins they call *mandari*, and they are worth three shillings a-piece. The hair of the seals, with which they ornament their cloaths and shoes, is dyed with the juice of the red wortleberry boiled with alder bark, alum, and lac lunæ; which
makes a very bright colour. They used to sew their cloaths and 294
shoes with needles made of bone, and instead of thread they made 412
use of the fibres of the deer, which they split to the size or 283
thickness required.

They

38/ They make glue of the dried ſkins of fiſhes, and particularly of the whale-ſkin. A piece of this they wrap up in birch bark, and laying it for a little while in warm aſhes they take it out; and it is then fit for uſe, and to me ſeems as good as the beſt *Yaick* glue.

CHAP. VII.

Of their DRESS.

29/ THEIR cloaths, for the moſt part, are made of the ſkins of deer, dogs, ſeveral ſea and land animals, and even of the ſkins of birds, frequently joining thoſe of different animals in the ſame garment. They make the upper garment in two faſhions; ſometimes cutting the ſkirts all of an equal length; and ſometimes leaving them long behind in form of a train. They are made of deer-ſkins, with wide ſleeves of a length to come down below the knee: there is a hood or caul behind, which in bad weather they put over their heads below their caps: the opening above is only large enough to let their head paſs: they ſew the ſkins of dog's feet round this opening, with which they cover their faces in cold ſtormy weather, and round their ſkirts and ſleeves they put a border of white dog-ſkin: upon their backs they ſew the ſmall ſhreds of ſkins or ſilk of different colours. They commonly wear two coats; the under coat with the hair-ſide inwards, the other ſide being dyed with alder; and the upper with the hair outwards. For the upper garment they chooſe black, white, or ſpeckled ſkins, the hair of which is moſt eſteemed for the beauty of its colours.

Men and women, without diſtinction, uſe the above-mentioned garments, their dreſs only differing in their under cloathing, and in the

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-skin;
what comes round the legs is of dreſſed leather or dyed ſeal-
skins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

302 they came to be Christians they were with difficulty prevailed
177 upon to quit this dress for one more decent: however, at present
291 round the *Russ* settlements all is intirely changed, the women wearing shirts, ruffles, waistcoats, caps and ribbands; which change nobody now complains of, except the very old people. The women do all their work in mittins: they formerly never washed their faces, but now they use both white and red paint; for white paint they make use of a rotten wood, and for red a sea plant *, which they boil in seals' fat, and rubbing their cheeks with it make them very red. They dress most in the winter time, especially when they either receive or pay visits.

435 The common cloaths for a *Kamtschadale* and his family will not cost him less than an hundred rubles, for the coarsest worsted stockings, which cost in *Russia* 20 kopeeks, cannot be bought here for less than a ruble; and all other things are sold in the same proportion. The *Kuriles* are more able to buy good cloaths than the *Kamtschadales*, for they can purchase for one sea beaver as much as the *Kamtschadales* can for twenty foxes, and one beaver costs the *Kuriles* no more trouble than five foxes do the *Kamtschadales*; for he must be a good hunter who catches more than ten foxes in the winter, and a *Kurili* thinks himself unlucky if he doth not catch three beavers in the season; besides which great numbers are thrown upon the shore by storms,

* Fucus marinus abietis forma. Pinus maritima, seu fucus teres. DOOD. Append. 326. RAY LINN.

CHAP.

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. VIII.

Of their DIET *and* LIQUORS, *together with their Method of* COOKING. 262

HAVING already mentioned that the food of the *Kamtſchadales* confiſts in roots, fiſh, and ſea animals, which are all deſcribed in the ſecond part of this book, we ſhall now relate their method of dreſſing them. And firſt, we will begin with the fiſh, which they uſe inſtead of bread. The principal food, called *yokola*, is prepared from 252
every ſort of fiſh, and ſerves them for houſhold bread. They 262
divide their fiſh into ſix parts; the ſides and tail are hung up to dry; the back and thinner part of the belly are prepared apart, and generally dried over the fire; the head is laid to ſour in pits, and then they eat it like ſalt fiſh, and eſteem it much, though the ſtink is ſuch that a ſtranger cannot bear it; the ribs and the fleſh which remain upon them they hang up and dry, and afterwards pound them for uſe; the larger bones they likewiſe dry for food for their dogs: in this manner all theſe different people prepare the *yokola*, and they eat it for the moſt part dry.

Their ſecond favourite food is caviar, or the roes of fiſh, which they prepare in three different ways: they dry the roe whole in the air, or take it out of the skin which envelopes it, and, ſpreading it upon a bed of graſs, dry it before the fire; or laſtly, make rolls of it with the leaves of graſs, which they
alſo dry. They never take a journey or go a hunting without 262
dry caviar; and if a *Kamtſchadale* has a pound of this, he can ſubſiſt without any other proviſion a great while; for every birch and alder tree furniſhes him with bark, which, with his

262 dried caviar, makes him an agreeable meal; but they cannot eat either ſeparately, for the caviar ſticks like glue to the teeth, and the bark, although it ſhould be chewed ever ſo long by itſelf, they are hardly ever able to ſwallow down alone. There is ſtill 252 a fourth method which both the *Kamtſchadales* and *Koreki* uſe 171 in preparing their caviar; having covered the bottom of a pit with graſs, they throw the freſh caviar into it, and leave it there to grow ſour: the *Koreki* tie their's in bags and leave it to ſour; this is eſteemed their moſt delicate diſh.

252 There is a third ſort of diet, called by the *Kamtſchadales* 262 *tchupriki*, which is prepared in this manner: in their huts over the fire-place they make a bridge of ſtakes, upon which they lay a heap of fiſh, which remains there 'till the hut becomes as warm as a bagnio; if there was no great thickneſs of fiſh one fire would ſerve to dreſs it; but ſometimes they are obliged to make two, three, or more fires. Fiſh dreſſed in this manner is half roaſted, half ſmoaked, and has a very agreeable taſte, and may be reckoned the beſt of all the *Kamtſchatka* cookery; for the whole juice and fat is prepared with a gradual heat, and kept in by the skin, in which it lies as in a bag, and when ready may be eaſily ſeparated from the fiſh; as ſoon as it is thus dreſſed, they take out the guts, and ſpread the body upon a mat to dry; this they afterwards break ſmall and put into bags, carrying it along with them for proviſion; and when dried eat it like the *yokola*.

252 The *Kamtſchadales* have a diſh, which they eſteem very 262 much, called *huigul*: it is fiſh laid to grow ſour in pits; and 171 though the ſmell of it is intollerable, yet the *Kamtſchadales* eſteem it a perfume. This fiſh ſometimes rots ſo much in the pits that they cannot take it out without ladles; however in that caſe they uſe it for feeding their dogs.

Mr. *Steller* ſays, that the ſummer *Samojeds* likewiſe ſour their fiſh; but that the earth being frozen preſerves it much better;

better; the *Jakutski* alſo dig deep pits, in which they lay their 252
fiſh, ſprinkling it with wood aſhes, and cover it with leaves at 262
top, and over all put a layer of earth: this method is better 171
than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their 252
troughs, with ſeveral different herbs and roots; the broth they 264
drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, 262
called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink 273
but water: but when they made merry they drank water 177
which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves fre- 271
quently by throwing handfuls of ſnow into their mouths; and 583
the bridegrooms who work with the fathers of their future brides 524
find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

CHAP. IX.

231 *The Method of* TRAVELLING *with* DOGS, *and the* FURNITURE *necessary thereto.*

THE Dogs of *Kamtschatka* differ very little from the common house dogs: they are of a middling size, of various colours, though there seem to be more white, 492 black, and grey, than of any other. In travelling they make use of those that are gelded, and generally yoke four to a sledge.

The alaki is made of broad double soft straps, which are put over the dogs' shoulders, the near dog having it over his left, and the off dog over his right. At the end of these alaki's is a small thong, with a hook at the end of it, which is fastened to a ring in the fore part of the sledge.

The pobeshnick is a long strap, and serves instead of a coach pole. It passes through a ring, which is in the middle of the fore part of the sledge.; and to it is fastened a chain that keeps the dogs together, that they should not run asunder.

The bridle is a long strap, with a hook and chain, which is fixed to the fore dogs, and is much longer than the pobeshnick, being fastened to a ring in the fore part of the sledge.

The osheiniki, or collars, are broad straps made of bear-skin, and are frequently put upon dogs merely for ornament.

They drive and direct their dogs with a crooked stick about four feet long, which they call the oftal, and sometimes adorn it with different coloured thongs: this is looked upon as a great 493 piece of finery. They drive their sledges sitting upon the right side

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon ſliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodovſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 491 484

'till

484 till he comes to ſome dwelling-houſe. This is very laborious,
491 but it happens ſo often, that no guide ever ſets out without his ſnow-ſhoes.

484 The greateſt danger is when a ſtorm of driven ſnow ſurpriſes them; then they are obliged with all haſte to ſeek the ſhelter of ſome wood, where they ſtay as long as the tempeſt laſts, which ſometimes is a whole week. If a ſtorm at any time ſurpriſes a large company of travellers, they dig a place for themſelves under the ſnow, and cover the entry with wood or bramble. The *Kamtſchadales* ſeldom make theſe temporary huts, but hide themſelves commonly in caves or holes of the earth, wrapping themſelves in their furrs; and when thus covered, they move or turn themſelves with the greateſt caution, leaſt they ſhould throw off the ſnow, for under that they lie as warm as in their common huts: they muſt only have the convenience of a breathing place; but if their cloaths are tight or hard girt about them, the cold is unſufferable.

If the ſtorms ſurpriſe them in an open country where there is no wood, they endeavour to find ſome hollow place, in which they ſhelter themſelves, but muſt be careful to prevent being ſmothered with the ſnow. The eaſt and ſouth-eaſt winds are generally attended with a moiſt ſnow, which wets the travellers; and being followed with the north wind and ſevere colds, ſeveral are then frozen to death.

Another danger attending the traveller is, that in the ſevereſt froſt ſeveral rivers are not quite frozen over; and as the roads for the moſt part lie cloſe upon the rivers, the banks being very ſteep, few years paſs in which many people are not drowned. A diſagreeable circumſtance alſo to thoſe who travel in theſe parts is their ſometimes being obliged to paſs through copſes, where they run the riſk of having their eyes ſcratched out, or their limbs broken; for the dogs always run moſt violently in the

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

the worſt roads, and to free themſelves very often overturn 484
their driver.

The beſt travelling is in the month of *March* or *April*, when 484
the ſnow is turned hard or frozen a little at top; however, there 147
is ſtill this inconvenience attending it, that ſometimes travellers are obliged to lodge two or three nights in deſert places; and it is difficult to prevail upon the *Kamtſchadales* to make fire either for warming themſelves or dreſſing victuals, as they and their dogs eat dried fiſh, and find themſelves ſo warm wrapt in their furrs that they want none; nay, it is ſurpriſing to ſee all the 573
people of this climate bearing the cold ſo well, that after having 147
ſlept a whole night very ſound they awake next morning as refreſhed and alert as if they had lain in the warmeſt bed. This ſeems to be ſo natural to all here, that I have ſeen ſome of them lie down with their backs uncovered againſt a fire, and notwithſtanding the fire has been burnt out long before morning, yet they continued to ſleep on very comfortably, and without any inconvenience.

CHAP. X.

Of the Kamtſchadales' *Method of making* WAR. 721

ALTHOUGH before they were conquered by the *Ruſſians*, the *Kamtſchadales* did not ſeem to have had any ambition of increaſing their power, or enlarging their territories, yet they had ſuch frequent quarrels among themſelves that ſeldom a year paſſed without one village or other being entirely ruined. The end of their wars was to take priſoners, in order

721 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.12 village

village to demand their tribute, they were received with all marks of friendſhip, and not only the tribute was paid, but likewiſe great preſents were made them. Thus the natives having lulled them into a ſtate of ſecurity, they either cut their throats in the night-time, or ſet fire to their huts, and burnt them with all the Coſſacks which were within. By ſuch ſtratagems 70 people were deſtroyed in two places, which, conſidering the ſmall number of Coſſacks that were there, was a very conſiderable loſs: nay, it has ſometimes happened that when they had no opportunity of deſtroying the Coſſacks at firſt, they have for two years quietly paid the tribute, waiting 'till they could find an opportunity of doing it. 726 R. 177 .72

By this cunning the *Kamtſchadales* deſtroyed at firſt many Coſſacks, but now the latter are more upon their guard, and are particularly afraid of extraordinary careſſes, always expecting ſome bad intention when the women in the night-time retire out of their huts. When the *Kamtſchadales* pretend to have dreamed of dead people, or go to viſit diſtant villages, there is reaſon to dread a general inſurrection.

When this happens, they kill all the Coſſacks which fall in their way, and even the *Kamtſchadales* who will not join in the rebellion. As ſoon as they hear that troops are coming againſt them, inſtead of going to oppoſe their enemies, they retire to ſome high place, which they fortify as ſtrongly as they can, and building huts there, wait 'till they are attacked, and then they bravely defend themſelves with their bows and arrows, and every other method they can think of; but if they obſerve, that the enemy is likely to make themſelves maſters of the fortreſs, they firſt cut the throats of their wives and children, and afterwards either throw themſelves down the precipice, or with their arms ruſh in upon their enemies that they 726 762 R. 177 .72

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and
R. the other in the year 1713 upon the river *Awatſcha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

When

When they march on foot it is remarkable that two never go a-breast, but follow one another in the same path, which by use becomes very deep and narrow; so that it is almost impossible for one that is not used to it to walk therein, for these people always set one foot strait before the other in walking.[1] 481

[Chapters XI-XIV of this source are a summary (and a distorted one) rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2]

CHAP. XI.

The Opinions of the Kamtschadales *concerning* God, *the Formation of the World, and other Articles of Religion.* 776

THE *Kamtschadales*, like other barbarous nations, have no notions of a deity, but what are absurd, ridiculous, and shocking to a humanized mind. They call their god *Kutchu*, but they pay him no religious worship, and the only use they make of his name is to divert themselves with it; they relate such scandalous stories of him as one would be ashamed to repeat. Amongst other things they reproach him with having made so many steep hills, so many small and rapid rivers, so much rain, and so many storms; and in all the troubles that happen to them upbraid and blaspheme him.

They place a pillar upon a large wide plain, which they bind round with rags. Whenever they pass this pillar they throw a piece of fish or some other victuals to it; and near it they never gather any berries, or kill any beasts or birds. This offering they think preserves their lives, which otherwise would be shortened: however, they offer nothing which can be of use to themselves, but only the fins and tails of the fish, or such things as they would be obliged to throw away. In this all these people of *Asia* agree, offering only such things as are useless to themselves. 778 782 886

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions.

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries.

CHAP.

CHAP. XII.

756
791

Of their SHAMANS, *or Conjurers.*

THE *Kamtſchadales* have none who are profeſſed *Shamans*, or conjurers, as the neighbouring nations have; but every old woman is looked upon as a witch and an interpreter of dreams. In their conjurations they whiſper upon the fins of fiſhes, the ſweet graſs, and ſome other things; by which means they cure diſeaſes, divert misfortunes, and foretel futurity.

787 They are very great obſervers of dreams, which they relate to one another as ſoon as they awake in the morning, and judge from thence of their future good or bad fortune; and ſome of theſe dreams have their interpretation fixed and ſettled. Beſides this conjuration they pretend to chiromancy, and to foretel a man's good or bad fortune by the lines of his hand; but the rules which they follow are kept a great ſecret.

CHAP. XIII.

796

Of their CEREMONIES.

THE *Kamtſchadales* always celebrated three days in the month of *November*, which is hence called the month of Purification. *Steller* imagines, that this was firſt inſtituted by their anceſtors to return thanks to God for all his bleſſings; but that afterwards, through the ſtupidity of theſe people,

people, it has been perverted by foolish and ridiculous ceremonies; and this appears the more probable, because that, after their summer or harvest labour is over, they look upon it as a sin to do any work, or make any visits, before this holiday, which if any one neglects he is obliged to expiate it at that time, if not before. From hence we may see that the ancestors of this people were accustomed to offer up the first fruits of their summer labours to God, and to make merry with one another. The northern and southern *Kamtschadales* have different ceremonies in the celebration of their holidays, which are extremely silly, and consist of many ridiculous anticks. I shall give a slight sketch of one of these assemblies in the southern *Kamtschatka*. 796

After many strange ceremonies they introduce a little bird and a fish, which they roast upon the coals, and divide amongst them, when every one throws his share into the fire as a sacrifice, or an offering, to those spirits which come to their feasts; then they boil dried fish, the broth of which they pour out before their image, and eat the fish themselves; and then take the birch-tree out of the hut, and carrying it to their magazines, lay it up there to be kept for the whole year. Thus ends the festival.

CHAP. XIV.

Of their FEASTS *and* DIVERSIONS. 527 574

THEY make feasts when one village entertains another, either upon the account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of opanga, 'till they are all set a vomiting; 273

273 ing; ſometimes they uſe a liquor made of a large muſhroon, with which the *Ruſſians* kill flies. This they prepare with the juice of epilobium, or *French* willow.

The firſt ſymptom of a man's being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad, according to his peculiar conſtitution. Some jump, dance, and ſing; others weep, and are in terrible agonies, a ſmall hole appearing to them as a great pit, and a ſpoonful of water as a lake: but this is to be underſtood of thoſe who uſe it to exceſs; for taken in a ſmall quantity it raiſes their ſpirits, and makes them briſk, courageous, and chearful.

276 It is obſerved, whenever they have eaten of this plant, they
824 maintain that, whatever fooliſh things they did, they only obeyed
828 the commands of the muſhroon: however, the uſe of it is certainly ſo dangerous, that unleſs they were well looked after it would be the deſtruction of numbers of them. The *Kamtſchadales* do not much care to relate theſe drunken frolicks, and perhaps the continual uſe of it renders it leſs dangerous to them. One of our Coſſacks reſolved to eat of this muſhroon in order to ſurpriſe his comrades; and this he actually did, but it was with great difficulty they preſerved his life. Another of the inhabitants of *Kamtſchatka*, by the uſe of this muſhroon, imagined that he was upon the brink of hell ready to be thrown in, and that the muſhroon ordered him to fall upon his knees, and make a full confeſſion of all the ſins he could remember, which he did before a great number of his comrades, to their no ſmall diverſion. It is related, that a ſoldier of the garriſon having eaten a little of this muſhroon, walked a great way without any fatigue, but at laſt, having taken too great
276 a quantity, he died. My interpreter drank ſome of this juice without knowing of it, and became ſo mad, that it was with difficulty that we kept him from ripping open his

his belly, being, as he ſaid, ordered to do it by the muſhroon. 276

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten. 276 439

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms. 535

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune. 533 534

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick 536 532

 for

for their diverſion in all their entertainments.

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY
576
261

WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.
576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

or whatever is agreeable to his landlord; in return for which he receives old rags, and uſeleſs lame curs. This, however, is reckoned no injury, but a proof of friendſhip; and he expects, in turn, to uſe his friend in the ſame manner. And if that man, who has thus plundered his friend, returns not his viſit in proper time, he does not thereby ſave his preſents, for the gueſt pays him a ſecond viſit, at which time he is obliged to make him what preſents he is able; but if, either out of poverty or avarice, he makes him none, it is looked upon as the greateſt affront, and he muſt expect this man always to be his enemy: beſides, it is ſo diſhonourable that no body elſe will ever live in friendſhip with him afterwards.

In their banquets they treat their friends in the ſame manner, only they do not torment them with heat, nor expect any preſents. When they entertain with the fat of ſeals or whales, they cut it out into ſlices; and the landlord kneeling before his company, with one of theſe ſlices in one hand and a knife in the other, thruſts the fat into their mouths, crying in a ſurly tone, *Ta na*, and with his knife he cuts off all that hangs out of their mouths, after they are crammed as full as they can hold. Whoever wants any thing from another may generally obtain it upon theſe occaſions; for it is reckoned diſhonourable for the gueſt to refuſe his generous landlord any thing. An inſtance of this happened, between a *Kamtſchadale* and a newly chriſtened Coſſack, juſt before I arrived, and was then the common ſubject of converſation. The Coſſack, according to the cuſtom of that country, had a *Kamtſchadale* to his friend, who he heard was poſſeſſed of a very fine fox-ſkin, which he greatly deſired, but which the *Kamtſchadale* would by no means part with. The Coſſack invited him to his hut, where he entertained him with vaſt plenty of victuals, and by throwing water upon burning-hot ſtones made the heat of the hut intolerable to his friend the *Kamtſchadale*, 'till at laſt he was obliged to beg for mercy.

 This

574 This the Coſſack would not grant 'till he had obtained a promiſe
576 of the fine fox-ſkin. It ſhould ſeem, that this entertainment
431 could not be agreeable to the *Kamtſchadale*: however, he ſeemed to be pleaſed with it, and to ſwear that he never thought it poſſible to make ſuch a heat, or that the Coſſacks could entertain their friends with ſo much reſpect; and declared, that though he looked upon his fox-ſkin as an ineſtimable rarity, yet he parted from it with pleaſure on that occaſion, and ſhould always remember the noble entertainment of his friend.

CHAP. XVI.

584 *Of their* COURTSHIP, MARRIAGES, *&c.*

WHEN a *Kamtſchadale* reſolves to marry, he looks about for a bride in ſome of the neighbouring villages, ſeldom in his own; and when he finds one to his mind, he diſcovers his inclination to the parents, deſiring that he may have the liberty of ſerving them for ſome time: this permiſſion he eaſily obtains, and, during his ſervice, he ſhews an uncommon zeal in order to ſatisfy them of what he can do. After having thus ſerved, he deſires liberty to ſeize his bride; and if he has happened to pleaſe the parents, his bride, and her relations, this is preſently granted; but, if they diſapprove of it, they give him ſome ſmall reward for his ſervices, and he departs. It ſometimes happens that theſe bridegrooms, without diſcovering any thing of their intention, engage themſelves in ſervice in ſome ſtrange village; and though every one ſuſpects their deſign, yet no notice is taken of it, 'till either he or his friend declares it.

When

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

When a bridegroom obtains the liberty of ſeizing his bride, he 583
ſeeks every opportunity of finding her alone, or in the company of a few people; for during this time all the women in the village are obliged to protect her; beſides ſhe has two or three different coats, and is ſwaddled round with fiſh nets and ſtraps, ſo that ſhe has little more motion that a ſtatue. If the bridegroom happens to find her alone, or in company but with a few, he throws himſelf upon her, and begins to tear off her cloaths, nets, and ſtraps; for to ſtrip the bride naked conſtitutes the ceremony of marriage. This is not always an eaſy taſk; for though ſhe herſelf makes ſmall reſiſtance, (and indeed ſhe can make but little) yet, if there happen to be many women near, they all fall upon the bridegroom without any mercy, beating him, dragging him by the hair, ſcratching his face, and uſing every other method they can think of to prevent him from accompliſhing his deſign. If the bridegroom is ſo happy as to obtain his wiſh, he immediately runs from her, and the bride as a proof of her being conquered, calls him back with a ſoft and tender voice: thus the marriage is concluded. This victory is ſeldom obtained at once, but ſometimes the conteſt laſts a whole year; and after every attempt the bridegroom is obliged to take ſome time to recover ſtrength, and to cure the wounds he has received. There is an inſtance of one, who, after having perſevered for ſeven years, inſtead of obtaining a bride, was rendered quite a cripple, the women having uſed him ſo barbarouſly.

As ſoon as the above ceremony is over, he has liberty next 585
night to go to her bed, and the day following, without any ceremony, carries her off to his own village. After ſome time, the bride and bridegroom return to the bride's relations, where the marriage feaſt is celebrated in the following manner; of which I was an eye-witneſs in 1739.

The

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

585 The bridegroom, his friends, and his wife, visited the father-in-law in three boats. All the women were in the boats, and the men being naked pushed them along with poles. About one hundred paces from the village to which they were going, they landed, began to sing, and used conjurations with tow fastened upon a rod, muttering something over a dried fish's head, which they wrapped in the tow, and gave to an old woman to hold. The conjuration being over, they put upon the bride a coat of sheep's skin, and tied four images about her: thus loaded she had difficulty to move. They went again into their boats, and came up to the village, where they landed a second time; at this landing-place, a boy of the village met them, and taking the bride by the hand led her, all the women following.

When the bride came to the hut, they tied a strap round her, by which she was let down the stairs, the old woman who carried the fish's head going before her. The head she laid down at the foot of the stairs, where it was trodden upon by the bride and bridegroom and all the people present, and then thrown into the fire.

All the strangers took their places, having first stripped the bride of superfluous ornaments. The bridegroom heated the hut and dressed the victuals which they had brought with them, and entertained the inhabitants of the village.. The next day the landlord, entertained the strangers with great superfluity, who on the third day departed; the bride and bridegroom only remained to work some time with their father. The superfluous dress which was taken from the bride was distributed among the relations, who were obliged to return them presents of far greater value.

587 The former ceremonies only relate to a first marriage; for in the marriage of widows, the man and woman's agreement is sufficient; but he must not take her to himself before her sins are

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 831
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

[This chapter is a summary rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2.]

CHAP. XVII. 1

163 *Of the* BIRTH *of their* CHILDREN.

IN general these people are not fruitful, for I could never learn that any one man had ten children by the same woman. Their women, as they say, have commonly very easy births: 844 *Steller* was present at the delivery of one of these women, who went out of the hut about her ordinary business, and in a quarter of an hour afterwards was carrying her child in her arms, without any change in her countenance. He likewise relates, that he saw another woman who was in labour three days, and to his great 843 surprise was at last happily delivered of a child, which came double, presenting the hips first. The conjurers attributed the occasion of this unnatural posture to the father, who in the time that the child ought to have been born was employed in making sledges, and bending the wood over his knee. Such ridiculous causes do they assign for every uncommon effect. 844 The women are delivered upon their knees, in presence of as many people as are in the village, without distinction of age or sex. They wipe the new-born child with tow, and tie the navel-string with thread made of nettles, and then cut it with a knife of flint: they throw the placenta to the dogs. They put chewed epilobium upon the navel, and wrap the infant in tow instead of swaddling cloaths: then every one caresses it, taking it in their arms, kissing it, and rejoicing with the parents. This is the only ceremony which they use. They can hardly be said to have professed midwives, and for the most part the mother or nearest relation performs the office.

The

The women, as was mentioned above, who desire to have 842
children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having 847
children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs 842
and different conjurations to prevent conception. Their super- 847
stition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the 846
birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES. 164 753

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines 757
consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

 certain

757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing
757 the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 The women uſe ſea raſberries ‡ to haſten their delivery; and
844 alſo a ſort of coral, which they make into powder like crab-eyes,
278 in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Impetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

decoction of the pentaphylladis fruticosus, and that not without 757
success. To wounds they apply the bark of the cedar, and with 278
this they pretend they can even extract arrows.

In costiveness they likewise drink the broth of their stinking fish, and in fluxes they eat lac lunæ, which is very common in this country. For the same distemper they likewise use meadow-sweet and tormentilla root.

Those who have sore throats use a decoction of the epilobium, which is also used by women in hard labours. When they are bit by a dog, or wolf, they lay the bruised leaves of the ulmaria upon the wound, drinking at the same time a decoction of them: this decoction they also admininister in the belly-ach and scurvy. The leaves and stalks bruised they use in burns. The decoction of this herb mixed with fish they use also in the tooth-ach; they hold it warm in their mouths, and lay a piece of the root upon the affected tooth. They use a species of gentian in the scurvy, and almost against every disorder. In the *French* disease they apply the chamaenchododendros, but seldom to any advantage: in fluxes they use the quercus marina: in swellings of the legs and scurvy, they drink a decoction of the dryas; and procure sleep by eating the seed of the ephedra. They foment their eyes with a decoction of seramus.

The inhabitants of the *Lopatka* use clysters, which probably 757
they learned from the *Kuriles*: they prepare them from a decoc- 177
tion of different herbs, sometimes with fat and sometimes with- 278
out: this they put into a seal's bladder, fastening to it any pipe which they can procure, and apply it in the common way: this medicine is in high esteem among them, and used in most distempers.

In the jaundice, they have a medicine, which they look upon 278
as infallible. They take the roots of the iris sylvestris, and 757
after cleaning them, beat them in warm water, and apply the juice, which they squeeze out, as a clyster, continuing it for

757 two days three times a day: this produces a purging, and ge-
278 nerally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the joins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

764
775 THE burial of the dead, if one can call throwing them to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corps, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

near the hut, that evil ſpirits, whom they imagine to be the occaſion of their death, ſeeing the dead body, may be ſatisfied with the miſchief they have done. However, they frequently remove to ſome other place, when any one has died in the hut, without dragging the corps along with them. 764 775 768

They throw away all the cloaths of the deceaſed, not becauſe they imagine they ſhall have occaſion for them in the other world, but becauſe they believe that whoever wears the cloaths of one that is dead will certainly come to an untimely end. This ſuperſtition prevails particularly among the *Kuriles* of the *Lopatka*, who would not touch any thing which they thought had belonged to a dead perſon, although they ſhould have the greateſt inclination for it. The Coſſacks make uſe of this ſuperſtition to prevent one another ſometimes from ſelling ready-made cloaths, by aſſuring the buyer that they belonged to a dead perſon. 784

After the burial of the dead they uſe the following purification: Going to the wood they cut ſome rods, of which they make a ring; and creeping through it twice, they carry it to the wood, and throw it towards the weſt. Thoſe who dragged out the body are obliged to catch two birds of one ſort or other; one of which they burn, and eat the other with the whole family. The purification is performed on the ſame day; for before that they dare not enter any other hut, nor will any body elſe enter their's. In commemoration of the dead, the whole family dine upon a fiſh, the fins of which they burn in the fire.[1] 764

1. [Chapter XX, which discusses the three Kamchadal dialects was not translated "as they are very unintelligible to an English reader." Chapter XXI is in the Koryak File as Source 23.]

CHAP

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CHAP. XXII.

ACCOUNT *of the Nation of the* KURILES.

THE manners of the *Kuriles* resemble those of the *Kamtschadales* so much, that we should have taken no notice of them separately if their external appearance and language were not very different. We can give no account of their origin more than of the other inhabitants of *Kamtschatka*.

These people are of a small stature, black haired, round visaged, somewhat swarthy, and withal more well-favoured than any of their neighbours. Their beards are thick, and their whole body is covered with hair, in which they particularly differ from all the other *Kamtschadales*. The men shave their heads as far back as the crown, allowing the other hair to grow to its full length. This custom they have probably taken from the *Japanese*, with whom they have some commerce. The women only cut the fore part of their hair, that it may not fall into their eyes. The lips of the men are blackened about the middle; the women's are entirely black, and stained round; their arms are likewise stained with different figures as far as the elbows. This custom they have in common with the *Tchukotskoi* and *Tungusi*. Both men and women wear silver rings in their ears, which they get from the *Japanese*.

Their cloaths are made of the skins of sea fowls, foxes, sea beavers, and other sea animals; and are generally composed of the skins of very different creatures, so that it is rare to see a whole suit made of the same sort of skins. The fashion resembles more

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more that of the *Tunguſi*, than the *Kamtſchadales*. Though they are ſo little regardful of uniformity in their own country cloathing, they are very proud to acquire ſuch as are made of cloth, ſerge, or ſilk, particularly thoſe of a ſcarlet colour; but ſo little care do they take of them when they have got them, that they will wear them when employed about the dirtieſt work.

Their huts are much the ſame as thoſe of the *Kamtſchadales*, only they keep them a little cleaner, covering generally the floor and walls with mats made of graſs. They feed for the moſt part upon ſea animals, and very little upon fiſh.

They are as ignorant of a deity as the *Kamtſchadales*. In their huts they have idols made of chips or ſhavings curiouſly curled. Theſe idols they call *Ingool*, and are ſaid to venerate them in ſome degree, but whether as good or evil ſpirits I never could learn. They ſacrifice to them the firſt animal which they catch, eating the fleſh themſelves, they hang up the ſkin before the image; and when they change their huts they leave the ſkin and the idol there. If they make any dangerous voyage they take their idol along with them; which, in caſe of imminent danger, they throw into the ſea, expecting by this method to pacify the ſtorm; and with this protector they think themſelves ſafe in all their excurſions.

They travel in the ſummer time in boats, in the winter in ſnow ſhoes. The men are employed in catching of ſea animals, the women in ſewing, during the winter; but in the ſummer they go out with their huſbands to hunt.

They are more civilized than the neighbouring people, being ſteady honeſt, and peaceable; their way of ſpeaking is ſoft and modeſt; they have a reſpect for old people, and an affection for each other, particularly their relations. It is a pleaſure to ſee with what hoſpitality they receive ſuch as come to viſit them from other iſlands: thoſe that come in boats,

boats, and thoſe that receive them from the huts, march in great ceremony, dreſſed in all their warlike accoutrements, ſhaking their ſwords and ſpears, and bending their bows, as if they were going into an engagement, and dancing up to each other 'till they meet, ſhewing the greateſt ſigns of delight, embracing and hugging one another, and ſhedding tears of joy. The people of the huts then carry the viſitants into their habitation, where they entertain them in the beſt manner, ſtanding and hearing them relate all the adventures that have happened to them in their voyage. The honour of this relation is reſerved for the oldeſt, who is always the orator; he informs them of every thing that has happened ſince the laſt meeting, how they have been employed, how they lived, where they travelled, whom they ſaw, what good fortune or misfortune has happened to them, who have been ſick, or who are dead. This relation ſometimes continues for three hours. When the ſtranger has ended, the oldeſt of the people who are viſited gives him an equal information of every thing that has happened to them. Before this the reſt muſt not ſpeak to one another; then, according as circumſtances are, they either condole with, or congratulate, each other, and finiſh the entertainment with eating, dancing, ſinging, and telling of ſtories.

In their courtſhips, marriages, and the education of children, they differ very little from the other *Kamtſchadales*. They have two or three wives, with whom they never publickly ſleep, but ſteal to them privately in the night time. They have an extraordinary way of puniſhing adultery: the huſband of the adultereſs challenges the adulterer to a combat, which is performed in the following manner: both the combatants are ſtripped quite naked, and the challenger gives the challenged a club about three feet long, and near as thick as one's arm; then the challenger is obliged to receive three ſtrokes upon his back from the challenged, who then returns him the club, and is treated in the ſame manner;

ooo ner; this they perform three times, and the result is generally the death of both the combatants: but it is reckoned as great dishonour to refuse this combat, as to refuse an invitation to a duel among the people of *Europe*. If any one prefers his life or safety to his honour, the adulterer then is obliged to pay to the husband of the adulteress whatever he demands, either in skins, cloaths, provisions, or other things.

The women have a harder time in child-bearing than the *Kamtschadales*, for they say, the *Kuriles* women do not recover after child-bearing for three months. The midwives give names to the children when they are born, which they always keep. If they have twins they destroy one.

Such as die in the winter they bury in the snow; but in the summer they are buried in the earth. Self-murder is as frequent here as among the *Kamtschadales*.

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OF THE

CONQUEST of *Kamtſchatka.*

PART IV.

CHAP. I.

Of the DISCOVERIES *made of* Kamtſchatka, *and the Planting of* Ruſſian *Colonies there.*

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THO' the *Ruſſian* territories upon the Frozen Ocean, from the river *Lena* eaſt to the river *Anadir*, were of prodigious extent, yet it was judged proper to give orders to every commiſſary to inform himſelf of the countries beyond the *Anadir*, and to endeavour to bring the inhabitants under ſubjection. By this means a knowledge of *Kamtſchatka*, and of the different people who inhabit it, was long ago obtained; eſpecially ſince the *Koreki*, which live upon

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upon the *Penſchinſka* and *Olutorſkoy* ſeas, came from *Anadir*, and had communication with the inhabitants of *Kamtſchatka*, to whoſe country they frequently travelled. But we have ſtill no authentick account who was the firſt *Ruſſian* that diſcovered theſe places: there is, it ſeems, a tradition of one *Theodot*, who for the ſake of trade went into *Kamtſchatka* as far as the river *Nicula*, which river is now called after him, *Theodotoſhine*. They pretend, that he went out of the river *Bova* into the Frozen Ocean with ſeven boats; that, being ſeparated from the reſt by a ſtorm, he was driven to *Kamtſchatka*, where he paſſed the winter; that the next ſummer, going round the *Kurilſkaya Lopatka* through the *Penſchinſka* ſea, he arrived at the river *Tegbil*, where he and all his company were murdered by the *Koreki*, which diſaſter was occaſioned by their having ſeen one of the *Ruſſians* kill another with fire arms; for the *Koreki* upon obſerving the effect of theſe weapons at firſt eſteemed the *Ruſſians* as ſome ſuperior beings; but perceiving them to be mortal, they were glad to free themſelves from ſuch dangerous neighbours. This tradition is confirmed by the account of one *Simeon Deſhnef*; who relates, that their voyage was very troubleſome, and that they were driven at laſt upon that promontory to the eaſt of the river *Anadir*: however, all this ſeems to be very uncertain. There is likewiſe an account, that in the year 1660 they recovered a woman who had been carried away from *Jakutſki* by the *Koreki*, and who related, that *Theodot*, with one of his companions died there of the ſcurvy; that others of them were murdered; and that the remainder, who eſcaped in boats, were never heard of. The *Kamtſchadales* acknowledge that ſome winter huts upon the river *Nicula* were built by *Ruſſians*.

All theſe different reports may eaſily be reconciled, if we ſuppoſe that *Theodot* and his companions were loſt between *Anadir* and *Olutorſkoy*. They had wintered in *Kamtſchatka*, upon the river *Tegbil*; whence in returning to *Anadirſk* over land,

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land, he died upon the road, and his companions were either murdered or loſt. However, at any rate, this diſcovery was of no great conſequence to the intereſt of the empire, as no information of the country was thereby obtained; ſo that the firſt diſcovery of *Kamtſchatka* may be attributed to the Coſſack *Atlaſof*.

This *Atlaſof* was ſent from *Jakutſki* to the fort *Anadirſk* in the year 1697. He was ordered to ſee if he could diſcover new countries, and bring them in ſubjection to the empire of *Ruſſia*, by the aſſiſtance of the *Koreki Yukageri*, who lay near *Anadirſk*. In the year 1698 he ſent out one *Luke Moroſkoi*, with ſixteen *Koreki*, in order to gather in the taxes at the moſt diſtant places; who at their return reported, that they had not only been among the *Koreki*, but even within four days' journey of *Kamtſchatka*; that they had taken one of their little forts, and had got a letter written in a language which no body could underſtand. Upon this, *Atlaſof*, with ſixty Coſſacks and as many *Yukageri*, marched into the country of *Kamtſchatka*, in order to make diſcoveries, and to prevail upon them to pay tribute, which he by fair methods obtained from the *Acklanſki*, but the fort *Taloſki* he reduced by force. After this, as they relate, he divided his company into two corps; the one of which he ſent to the Eaſtern Ocean, under the command of *Luke Moroſkoi*, and with the other he in perſon went towards the *Penſchinſka* ſea. Upon the *Pallana* his allies, the *Yukageri*, rebelled againſt him, killed three of his Coſſacks, and wounded *Atlaſof* himſelf and fifteen others; however he overcame the *Yukageri*, and killed them all. Notwithſtanding this misfortune he purſued his journey ſouthwards. Upon the river *Tegbil* he joined the party under *Moroſkoi*, and exacted tribute from the people that lived upon the *Napan*, *Kigil*, *Itche*, *Sintche*, and *Haruſof*, and reſcued a *Japaneſe* priſoner that he found among the *Kamtſchadales*.

Returning from the river *Itche* he went to the river *Kamtſchatka*, where he built the upper *Kamtſchatkoi* fort,

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and left in it *Potap Sirukof*, with fifteen Coſſacks. *Atlaſof* returned from this journey to *Jakutſki* the 2d of *July* 1700, and brought along with him the *Japaneſe* he had reſcued, and the *Kamtſchatka* tribute, which conſiſted of 3200 ſables, ten ſea beavers, ſeven pieces of beavers' ſkins, four otter ſkins, ten grey foxes, and 191 red foxes; and 440 ſables on his own account. With this tribute he was diſpatched to *Moſcow*, where, for his ſervices, he was made Chief of the Coſſacks at *Jakutſki*, and was ordered to return again to *Kamtſchatka*, and to take along with him from *Tobolſka*, *Jeniſei*, and *Jakutſki*, 100 Coſſacks. Orders were ſent to *Tobolſka* to furniſh them with ſome ſmall cannon, colours, a drummer, arms, and ammunition. However *Atlaſof* was prevented from this expedition before the year 1706; for in the year 1701, upon the river *Tunguſi*, he plundered a boat with *Chineſe* goods, belonging to *Logan Dobrini*, whoſe ſervant petitioned againſt him, at the Chancery of *Jakutſki*, for which he and ten of the principal robbers were put in priſon; and in the year 1702 *Michael Zinoveef*, who had been there formerly, was ſent chief of this expedition.

All this time the Coſſack *Potap Sirukof* lived quietly in the fort of *Kamtſchatka*, and for three years received no injury from the inhabitants: for he did not demand any tribute, but only traded with them like a merchant. At laſt they determined to leave the fort; but on their return to *Anadirſk*, he and all his companions were ſet upon and killed by the *Koreki*. His ſucceſſor appears to have been *Timothy Cobelof*, who is reckoned the firſt governor of *Kamtſchatka*. In his time a fort was built upon the river *Karakeef*, about half a verſt diſtant from the firſt. He built winter huts upon the river *Yeloſka*, and gathered voluntary tribute upon the river *Kamtſchatka*, and upon the *Penſchinſka* and Beaver ſea-coaſt; with which he returned, in the year 1704, to *Jakutſki*. At the ſame time a party of the *Anadirſki* Coſſacks, under the command of *Andrew Kutin*, built ſeven winter huts upon the river *Yaka*, which falls

falls into the Eastern Ocean, and began to gather taxes from the neighbouring *Koreki* R. 177 .17

Michael Zinoveef, sent in place of *Atlasof* from *Jakutski*, succeeded *Cobelof*; which place he held 'till he was relieved by *Kolesof*, in the year 1704. In his time he made books of tribute, in which the names of the *Kamtschadales* were inserted; he transported the winter huts to a more convenient place, built a little fort upon the great river, and having brought things into tolerable order, he returned to *Jakutski* with his tribute. *Kolesof* arrived there in the harvest 1704, and continued to the year 1706; for the *Outori* killed two persons on their journey that were appointed to relieve him, viz. *Vasili Protopopof* in 1704, and *Visili Shelcocosnicof* in 1705. In his time was the first expedition undertaken against the *Kuriles*, about twenty of whom they brought back with them, and drove all the rest away. He carried all his tribute safe to *Jakutski*, notwithstanding he was way-laid at the fort *Kasuki*, upon the river *Pingin*, by the *Koreki*, but he retired to another little fort called *Aklanski*, where he lived about fifteen weeks, 'till the winter way became passable. During this time the *Koreki* of *Kasuki* tried several times to surprise him, but he was defended by the inhabitants of *Acklanski*. Here *Kolesof* met seven people that were sent with presents and ammunition to the fort of *Kamtschatka*; as he was in great want of the latter, for their security he added to them thirteen of his own party, and gave the command to *Simon Lomgaf*, whom he ordered likewise to gather tribute round the three *Kamtschatka* forts.

At the departure of *Visili Kolesof* all the tributary *Kamtschadales* were tolerably quiet; but afterwards, when *Theodore Anqudenof* was commissary in the upper fort, *Theodore Yaregin* in the lower fort, and *Demetrie Yaregin* upon the Great River, the inhabitants of the Great River rebelled, burned the fort, and murdered all the inhabitants: at the same time five tax-gatherers were killed upon the Beaver Sea. The reason of their rebellion

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perhaps might be, that the taxes were gathered with ſeverity, which was the more intolerable, as formerly they had never been accuſtomed to pay any, and therefore endeavoured, by the murder of their oppreſſors, to recover their ancient liberty: beſides, they imagined that theſe *Ruſſians* might be themſelves ſome runaways, as they had never obſerved any new faces among them; they hoped too, that the *Koreki* and *Olutores* would prevent the arrival of new recruits from the *Anadirſk*, as they heard that they had murdered two commiſſaries, with the Coſſacks under their command; however they were deceived in their hopes, for a great many of them were killed by their future conquerors, and their numbers very much reduced.

All this while the Coſſacks were obliged to be very much upon their guard, and keep themſelves cloſe in their forts. In the year 1705 *Atlaſof* was freed from priſon, and ſent commiſſary to *Kamtſchatka*, with full authority, the ſame as he was inveſted with in the year 1701. The abſolute power of puniſhing with rods, or even the knout, was no otherwiſe circumſcribed than by a recommendation to do ſtrict juſtice, and to treat the *Kamtſchadales* in particular with lenity and tenderneſs. He went from *Jakutſki* accompanied by a great number of Coſſacks, furniſhed with warlike ſtores, and two pieces of braſs cannon; but ſo far did he forget the favour of the pardon he had obtained for his former robbery, and diſregard his new inſtructions, that before he arrived at *Anadirſk* he began to exerciſe his cruelty upon thoſe that were under his command, and became ſo intolerable that they ſent a petition thence againſt him to *Jakutſki*. Notwithſtanding this he arrived ſafely at *Kamtſchatka* in the month of *July* 1707, and took the chief command over all the commiſſaries that were there.

In the month of *Auguſt* he ordered one *John Taretin*, with ſeventy Coſſacks, to march againſt the rebels who had killed the tax-gatherers upon the Beaver Sea. He met with no oppoſition before

before the 27th of *November*, in his whole march from the upper fort to *Awatscha*, but coming near the bay of *Awachinskay*, which is called at present the haven of *Peter* and *Paul*, they were met in the evening by 800 *Kamtschadales*, who thought themselves so certain of overcoming the Cossacks, that they resolved not to kill but take them all prisoners, every one being furnished with a rope to bind them. R. 177 .17

The next day *Taretin* went to the bay of *Awatchinskay*, where he found all the boats and vessels of the rebels; but they had hidden themselves in the woods on each side of the road; and allowing the headmost to pass they rushed out upon the middle from both sides. The Cossacks defended themselves so well, and fought so obstinately, that great numbers of the rebels were killed, and the rest saved themselves by flight; six of the Cossacks were slain, and several wounded. There were only three *Kamtschadales* taken prisoners. After this action the inhabitants continued in a state of rebellion 'till the year 1731. From this expedition the Cossacks returned to the upper fort with what tribute they had gathered, and some hostages. Hitherto the government of *Kamtschatka* had been in tolerable order, and the Cossacks preserved a regard for their commanders; but afterwards they began to commit great irregularities, plundering the inhabitants, seizing their persons, and murdering others, in defiance of the governor.

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CHAP. II.

Of the MUTINY *of the* COSSACKS, *and their Discovery of the Islands lying between* Kamtschatka *and* Japan.

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THE Cossacks were dissatisfied with *Atlasof*. This discontent, encreasing by his continued ill conduct and their own licentiousness, made them resolve to deprive him of the command, which they did in *December* 1707; and they wrote to *Jakutski*, in their own vindication, that he gave them none of those provisions which were gathered from the *Kamtschadales*, for their sustenance; for they being otherwise employed in the fishing time, than in catching fish, must starve, unless the governor would supply them from the publick stores, which they charged him with embezzling for his own private advantage. They also accused him of having taken bribes to let the hostages go, which rendered the natives so insolent, that the tax-gatherers upon the *Penschinska* sea were obliged to save themselves by flight. To this they added his cruel treatment of *Daniel Belaiof*; and that, when the other Cossacks begged of him that he would not cut and slash any of them in his passion, but punish them as his orders directed in case they were found guilty, he replied, that if he was to kill them all he should not be punished for it: they besides represented, that he endeavoured even to irritate the natives against the Cossacks; for having called some of the principal people of the former, he told them, he had wounded that Cossack because he and others would have forced him to take the bread and provisions from them, their wives, and children; upon which the *Kamtschadales* in that neighbourhood left the place, and killed three Cossacks; that he had

had taken to his own use most of the goods that were sent from *Jakutski* to make presents of to the natives; and that he had compelled one of the *Kamtschadales* to give him a black fox-skin for his own use, which the said native had designed to pay in as a tribute.

This accusation of their's, though it may be a proof of their former mutinous disposition, yet gives us room to believe that a great deal of what they alledged was true, he being a man of a very bad character and conduct, and exceedingly avaricious, as appeared by the great riches he had amassed in so short a time: but it is scarce credible that he should endeavour to irritate the natives against his own people, on whose protection the safety of his own life depended; for the intended murder of the tax-gatherers upon the *Penschinska* sea was more to be attributed to their own oppression of the natives than to any misrepresentation of *Atlasof*, as it appeared they threatened to kill some *Kamtschadales*, who insisted on paying but one sable instead of two.

They conferred the command on *Simeon Lomyof*, imprisoned *Atlasof*, and confiscated all his effects to the treasury, which consisted of 1234 sables, 400 red foxes, 14 grey foxes, and 75 sea beavers, besides a great number of other furrs. *Atlasof* escaped, and fled to the lower fort, of which he endeavoured to obtain the command, but was prevented by the commissary *Theodore Yaregin*. During these confusions, the petition that was sent against *Atlasof* reached *Jakutski*. The governor, fearing that the dissentions and differences between *Atlasof* and the Cossacks might occasion the loss of *Kamtschatka*, sent to court for farther directions; and in the interim dispatched *Peter Tcherekof*, with fifty-five Cossacks, two pieces of cannon, and ammunition. While *Tcherekof* was upon the road, advice was brought from *Kamtschatka* that the Cossacks had taken the command from *Atlasof*: upon which orders were sent after *Tcherekof*, to examine strictly

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into all this affair, and transmit his report to the *Jakutski* Chancery, by the commissary *Simeon Lamyof* for their resolution, and that by the same hand he should likewise send all the taxes which were gathered. But *Tcherekof* had left *Anadirsk* before this order arrived, and, as the road from thence to *Kamtschatka* was dangerous, the messenger durst not go any farther, for the travelling along the *Olotorski* and *Penschinska* seas was so very unsafe that on the 20th of *July* 1709, notwithstanding *Tcherekof*'s force, they were fallen upon in the day-time, their stores and baggage were plundered, ten of them killed, and the rest surrounded 'till the 24th, when they made a bold push, and fought their way through with the loss of two more of their company.

During the government of *Tcherekof* two things happened that deserve notice: 1st, The unfortunate expedition of the Cossack Lieutenant *John Haritonof* with forty men against the rebels upon the North-East River, who fell upon him in great numbers, killed ten of his people, and wounded most of the rest, whom they likewise kept besieged four weeks. 2d, A bark from *Japan* being cast away on the Beaver sea coast, *Tcherekof* went with fifty men and rescued four of the *Japanese* from the natives, whom on that occasion he reduced to obedience, as also the inhabitants round the rivers *Jupinof* and *Ostrova*, and obliged them to pay their tribute.

In the month of *August*, when *Tcherekof* returned to the upper *Kamtschatka* fort, he found the Lieutenant *Myeronof*, who was sent to relieve him; so that at this time there were three chiefs at *Kamtschatka*, namely, *Atlasof*, *Tcherekof*, and *Mieronof*.

When *Tcherekof* had delivered up to *Mieronof* the command, he left the upper *Kamtschatkoi* fort in the month of *October*, and taking with him the tribute he had gathered, with a proper convoy, marched to the lower fort, where he resolved to winter, and in the

the ſummer to ſail through the *Penſchinſka* ſea. *Joſeph Mieronof* came likewiſe to the lower fort upon the 6th of *December*, to give orders concerning the building boats for carrying off the tribute; and having left proper directions for this purpoſe with *Alexi Alexander*, he ſet out with *Tcherekof* to the upper fort, on the 23d of *January* 1711: but he was murdered on the road by the twenty Coſſacks who were his convoy. In the mean time thirty-one of the others went to the lower fort, where they killed *Atlaſof*. The heads of this mutiny were *Daniel Anſiforof* and *John Koſoroſki*, who ſhared the goods of thoſe they put to death; and inviting all the reſt to join with them, their number increaſed to ſeventy-five. All *Atlaſof*'s furrs and goods which were carried to *Tegbil* they brought back, ſeized on all the ſtores which were got ready for *Tcherekof*'s voyage, and deſtroying the ſails and cordage returned to the upper fort on the 20th of *March*.

On the 17th of *April* in the ſame year, theſe mutineers ſent a petition to *Jakutſki*, confeſſing the murder of *Tcherekof* and *Mieronof*, without mentioning that of *Atlaſof*. In this petition they endeavoured to excuſe their conduct, by accuſing theſe commiſſaries of tyranny and avarice, and charging them with having embezzled the effects of the government, and purchaſing goods upon their own account, from which they received incredible profits; and that they had treated both the natives and Coſſacks with great ſeverity, to avoid which they were obliged to give them up their beſt effects, and to receive their ſalary in what goods they thought fit to allow them, and thoſe taxed at what price they pleaſed; which oppreſſion they exerciſed in confidence that no petitions againſt them would ever reach *Jakutſki*. To this petition they joined a liſt of the effects of *Tcherekof* and *Mieronof*, which they had found: *Tcherekof*'s conſiſted of 500 red foxes, and 20 ſea beavers; *Mieronof*'s, of 800 ſables, 400 brown foxes, and 30 ſea beavers.

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This year in the spring, the seventy-five persons before mentioned marched against the rebels, and built a fort upon the Great River, thinking to merit their pardon by so essential a piece of service as the reduction of that district. On the 1st of *April* they destroyed a fort of the *Kamtschadales*, which lay between the rivers *Bistroy* and *Goltsofka*, where now the *Russian* fort *Bolschereteskoi* stands. There they remained without any disturbance from the *Kamtschadales* 'till *May*; on the 22d the *Kamtschadales* and *Koreki* came in boats down the Great River in such numbers that they threatened to smother them with their caps without using any other arms. On the 23d of *May*, the Cossacks, after having performed divine service, for they had a priest along with them, made a sally with one half of their party, and firing upon the *Kamtschadales* several times, killed great numbers of them: however they continued the fight 'till the evening, when at last the Cossacks obtained the victory. Such numbers of the rebels were killed and drowned in this engagement, that the river was full of dead bodies; but the *Russians* had only three men killed, and some few wounded. This success was followed by the subjection of all the villages and forts upon the Great River, who consented to pay their tribute as before. They went into the country of the *Kuriles*, and even unto the first island; all the inhabitants of which they likewise made tributary. This was the first time that any *Russian* had been upon either of these islands.

In the year 1711, *Vasili Savastianof* was sent to succeed *Mieronof*; for they had no account yet of his having been murdered, nor had they any knowledge at *Jakutski* of the fate of the other commissaries. *Savastianof* gathered the taxes about the upper and lower forts: *Ansiforof*, the head of the mutineers, had done the same upon the Great River, and came to the lower fort pretending to have returned again to his duty; however he came accompanied with such a strong party that he was in no danger-

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danger of being called to account for his mutiny, but was sent as tax-gatherer to the Great River. As he returned towards the *Penschinska* sea, he reduced to obedience the rebels upon the rivers *Konpackova* and *Worofski*, and obliged them to pay the tribute, which they had refused for some time. He was surprised by the rebels upon the river *Awatscha* in the month of *February* 1712: When he with 25 Cossacks came among them, they received him in a large hut, built on purpose, with a private entry under it. They made him very rich presents, promised to pay the full tribute, and gave hostages as an earnest of their sincerity: but the following night they set fire to the hut, and burned both the *Russians* and their own hostages together; who were so irritated against the *Russians*, that when the people called to them to come out of the hut, they begged that they would have no regard to them, but burn the Cossacks by any means.

The punishment of the murderers of *Ansiforof* deterred the natives from the like attempts, and procured a lasting security to the tax-gatherers. A party was sent out to catch the murderers where they could find them: at this time there was one man taken, who being put to the torture confessed not only the murder of the three commissaries, but likewise a great many other dangerous designs, as that they resolved to destroy the upper and lower forts of *Kamtschatka*, murder the governor *Shepetkof*, plunder the fort of all the goods, and fly to the islands; but they were prevented in this by the great number of Cossacks which they found.

Shepetkof, giving the command to *Constantine Koserof*, left *Kamtschatka* on the 8th of *June* 1712, and sailed with the tribute which he had gathered over the *Olutorskoy* sea, and up the river of the same name as far as it was navigable for boats. Then he was obliged to fortify himself against the attacks of the *Olutores*, who on the road had several times fallen upon him.

R. 177 .17 him. He continued in this little fort 'till the 9th of *January* 1713, with 84 Coſſacks. In the mean time he ſent to *Anadirſk* for a reinforcement, and carriages to tranſport the tribute. There were ſent him 60 Coſſacks, and a great number of reindeer; with which he ſet out, and arrived ſafe at *Jakutſki* in the month of *January* 1714. This was the only tribute which had arrived ſafe, upon account of the confuſions, ſince the year 1707. It amounted in all to 13,280 ſables, 3282 red, 7 black, and 41 blue foxes, and 259 ſea beavers.

After the departure of *Shepetkof*, *Kregezof*, who was commiſſary in the upper *Kamtſchatkoi* fort, went with ſeveral under his command to the lower fort, ſeized upon *Yaregin* who was commiſſary there, put him to all kind of torture, plundered the fort, and obliging *Yaregin* to turn monk gave the command of the fort to *Bogdan Kanaſhof*; who continued there 'till the arrival of *Vaſili Koleſof*, formerly a lieutenant of the Coſſacks; and *Kregezof* with 18 of the mutineers returned to the upper *Kamtſchatkoi* fort, where he was very troubleſome to the lower fort for a long time.

Koleſof was ſent from *Jakutſki* in the year 1711, with orders to enquire into the conduct of the mutineers, and arrived at *Kamtſchatka* on the 10th of *September* 1712; where he condemned two of the rebels to death, and branded ſeveral others. The lieutenant *Koſerof*, who was head of the mutiny after the death of *Anſiforof*, and ſeveral others, were puniſhed; but *Kregezof*, who was ring-leader in the laſt mutiny, not only refuſed to ſubmit to his juriſdiction, but threatened even to attack him, and to deſtroy the lower fort. In conſequence of which he marched againſt him with cannon and 30 men of his party, and was joined in his march by other Coſſacks from the Great River: however he did not accompliſh his deſign, but was obliged to return to the upper fort, where in

a very ſhort time his own people took the command from him, and put him in priſon; for finding that the other Coſſacks did not join him, they imagined it would be impoſſible for them to paſs the lower fort in their way to the ſea. Whereupon they divided themſelves into two parties; one of which ſtood by *Koſerof*, and the other joined *Koleſof*. By this means *Koleſof* made himſelf maſter of the upper fort in the year 1713. *Kregezof* was puniſhed with death, with ſome others of the ring-leaders, and the reſt were fined: thoſe Coſſacks and tax-gatherers, who continued in their duty, were rewarded. Thus an end was put to the rebellion.

After this *Koleſof* ſent *Koſeroſki* with 55 Coſſacks, 11 *Kamtſchadales*, and ſome cannon, ordering them to build ſmall veſſels upon the Great River, and to make diſcoveries upon the iſlands that belong to *Japan*. In this expedition they reduced to obedience ſeveral of the *Kuriles* who dwelt upon the *Lopatka*, and the firſt and ſecond *Kuriſki* iſlands. They alſo procured ſome account of the iſlands that were more diſtant, which traded with the inhabitants of the city *Matma*, and who brought to them iron kettles, varniſhed cups and platters, ſables, and different ſorts of ſtuffs made of cotton and ſilk. *Koſeroſki* brought a ſortment of theſe merchandiſes along with him.

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CHAP. III.

Of the COMMISSARIES *who succeeded* Vasili Kolesof *until the great Insurrection at* Kamtschatka; *with the Discovery of a Passage through the* Penschinska Sea *from* Ochotska *to* Kamtschatka.

IN *August*, 1713, *John Inesiski* was sent to relieve *Vasili Kolesof*. In the time of his government he built a church at a place called the Springs, whither he designed to remove the lower fort, which was afterwards executed; the former situation being on a marsh, which was sometimes overflowed by the high water. This fort continued until the year 1731. In the time of the great rebellion, it was burned down by the rebels. He likewise marched against those who rebelled upon the river *Awatscha*, who had murdered *Ansiforof* with his 25 Cossacks. His strength consisted of 120 Cossacks and 150 *Kamtschadales*. The rebels had fortified themselves so strongly, that they held out two weeks; but at last they set their fort on fire, which was burned with all the people that were in it: the rest submitted, and promised to pay their tribute. They likewise took and burned the fort *Paratoon*. After this time the *Kamtschadales* upon *Awatscha* began regularly to pay their tribute; for before this they generally gave but just what they pleased, being almost always in a state of rebellion.

In 1714 *Yanisioski*, and the former commissary *Vasili Kolesof*, who had not been able to undertake the journey to *Jakutski* for want of hands in the year 1713, passed in boats over the *Olutorskoy* sea, and arrived the latter end of *August* upon the river

river *Olutora*, where they found *Athanasius Petrof*; who being joined by a great many Cossacks from *Anadir*, together with the *Yukageri*, defeated the *Olutores*, destroyed their strongest places, and in place thereof built a *Russian* fort. Here they remained until the winter. The taxes which both these commissaries brought along with them were 5640 sables, 751 red foxes, 10 blue, 137 sea beavers, 4 ounces of gold in bits, which were taken from the *Japanese*, whose vessels had been wrecked upon the coast of *Kamtschatka*. Upon the departure of these commissaries a garrison of 100 men, a lieutenant, and two priests, were left in the new fort upon the *Olutora*.

On the 2d of *December* 1714, the *Yukageri* who were with *Petrof* fell upon him near to *Acklanskey* fort, and having murdered him, the people that were with him seized upon the tribute. The commissaries *Kolesof* and *Yanisioski*, with sixteen others, escaped into the *Acklanskey* fort, but were not able to save their lives; for the *Yukageri* surrounding the fort prevailed upon the *Koreki* to murder these people, who had trusted themselves to their protection. The occasion of this misfortune was owing to the tyranny and oppression of *Petrof*. All pains were taken to recover the plundered goods, but to very little effect, as they were divided among so many different nations and people; so that some of the richest furrs fell into the hands of those who knew so little of their value, that for one or two pipefuls of tobacco they would sell a fine sable or fox skin. This disturbance of the *Yukageri* and *Koreki* continued more or less 'till the year 1720, when they were reduced to obedience by *Stephen Trisonof*, a gentleman of *Jakutski*, who went against them with a great number of Cossacks. So far had they carried their designs, that they endeavoured to prevail upon the *Tchukotskoi* to join in their rebellion, and to destroy the fort of *Anadir*.

After the murder of the commissaries the tribute of *Kamtschatka* was no more carried through *Anadir*, but sent directly by sea

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ſea to *Ochotſka*, which is by far a more convenient and leſs dangerous paſſage; ſo that now the road to *Anadir* is entirely neglected. This paſſage by ſea was diſcovered in the year 1715, by one *Coſmus Socoloſ*, who was under the command of Colonel *Ilchin* ſent to deſcribe the iſlands that lie upon that ſea. At this time *Alexi Petriloſki* was commiſſary at *Kamtſchatka*, againſt whom the Coſſacks began again to mutiny; and by the conſent of *Socoloſ*, they took the command from *Petriloſki*, put him under arreſt, and confiſcated his goods. He was the occaſion of his own miſfortunes, by extortion, an unbounded avarice, and tyrannically oppreſſing to the laſt degree every man under his command. By theſe means he had acquired ſuch riches in a very ſhort time, that they far exceeded two whole year's tribute of *Kamtſchatka*.

The natives were tolerably quiet all this while, excepting ſome ſmall differences between the *Kuriles* of the *Lopatka* and another tribe, which was the cauſe of the deſtruction of ſeveral tributary *Kuriles*. The tribe, who was the firſt beginner of this confuſion, was ſo much afraid of being puniſhed by the *Ruſſians*, that they would never come to any terms of accommodation. However, at laſt, they were reduced with no great trouble. The conduct of the *Ruſſian* commiſſaries and tax-gatherers was ſo irregular, and ſo diſagreeable to the natives, that the moſt fatal conſequences were to be feared.

To *Petroloſki* ſucceeded as commiſſary *Coſmus Vaichelaſhof*, to whom ſucceeded *Gregory Kamkin*. In the year 1718, at once three commiſſaries were ſent from *Jakutſki*; *John Uvarofski* to the lower *Kamtſchatkoi* fort, *John Porotof* to the upper, and *Baſil Kochanof* to the fort upon the Great River. According to cuſtom, the Coſſacks very ſoon deprived them all of their authority, and put them into priſon, where they continued half a year, and at laſt eſcaped. However, the authors of this mutiny were brought to *Tobolſki*, and puniſhed with death.

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While the Coſſacks perſevered in this mutiny, ſeveral of the tax-gatherers were murdered by the natives. R.

John Charetonof, who had been appointed commiſſary, in 1719 marched againſt the rebellious *Koreki*; but being ſurpriſed by them he and ſeveral of his company were killed, which was done in this manner: The rebels pretending to ſubmit, gave them hoſtages and preſents; but afterwards fell upon *Charetonof*, and killed him and ſeveral others. However, they paid very dear for this treachery; for ſome of the Coſſacks, recovering from their ſurpriſe, drove them into their fort, where they burned or killed every man of them. In the following years, until the great rebellion of *Kamtſchatka*, nothing remarkable happened, if we except thoſe conſiderable expeditions that were ſent out in the years 1727, 1728, 1729, to make diſcoveries among the iſlands of the *Kuriles*. The firſt was conducted by two mariners, *John Evrinof* and *Theodore Luſin*, who returned in 1727. In 1728 was ſent out the firſt great ſea expedition, to diſcover and deſcribe all the coaſt towards the north. Having proceeded as far as the latitude 67° 17′, they returned to *Peterſbourg* in the year 1730. In 1729 a party arrived there under the command of Captain *Paulutſkoy*, and a chief of the Coſſacks called *Sheſtocof*. They were ordered to go along the coaſt towards the ſouth to make proper diſcoveries, and to bring all the inhabitants of theſe places, either by fair means or force, to pay a regular tribute; and for that purpoſe, to build forts, and endeavour to eſtabliſh ſome commerce. They built ſome forts, and deſcribed the coaſt as far as the river *Udan* upon the *Chineſe* frontiers. *Sheſtocof* was killed in the year 1730 by the *Tchukotſkoi*, who had fallen upon the tributary *Koreki*; and Captain *Paulutſkoy* was ordered to join Colonel *Merlin*, in quelling the rebellion of *Kamtſchatka*. He was indeed ſo far more ſucceſsful than *Sheſtocof*, that he ſeveral times defeated the *Tchukotſkoi*, and for ſome time rendered the *Koreki* and *Anadirſkoi* ſafe from their inroads.

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In the ſummer of the year 1729, a *Japaneſe* veſſel was wrecked upon the coaſt of *Kamtſchatka*: there were ſeventeen men on board, all of whom, except two, were murdered by Lieutenant *Stimicof*, who happened to be there at that time. The two ſurvivors were ſent to *Peterſbourg*, where they had the ſatisfaction of ſeeing the murderer of their countrymen publickly executed. In 1730 *John Novogorodof*, and in 1731 *Meyer Shedfordin*, were tax-gatherers in *Kamtſchatka*. We only mention them as being the occaſion of the great rebellion, which we are now to deſcribe.

CHAP. IV.

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Of the REBELLION *of* Kamtſchatka, *the Burning of the Lower Fort, the Subjection of the Rebels, and their Puniſhment.*

THE natives had reſolved for a great while to deſtroy all the *Ruſſians* who were in *Kamtſchatka*; but ſince the diſcovery of the paſſage over the *Penſchinſka* ſea, and the arrival of veſſels with new people, it appeared to them too dangerous: but when Captain *Bering* with his fleet ſailed on the expedition of *Kamtſchatka*, and moſt of the Coſſacks who were ſettled in *Kamtſchatka* were ordered to join Captain *Paulutskoy* at *Anadir*, to ſuppreſs the rebellious *Tchukotskoi*, very few Coſſacks were left in *Kamtſchatka*. This the natives looked upon to be the wiſhed-for opportunity; and during the whole winter the *Niſhnaſhaltalski*, *Klutcheſski*, and *Yaloſski Kamtſchadales*, under pretence of viſiting one another, travelled through all *Kamtſchatka*, and inſtigated the other inhabitants to join in their deſigns, under

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under pain of being intirely destroyed. By these means all *Kamtschatka* entered into a state of open rebellion; and hearing that *Shesticof* was killed by the *Tchukotskoi*, they reported that these people were marching against *Kamtschatka*, with a view either to have a pretence for collecting themselves together, or that the *Russian* Cossacks, out of fear of these people, might desire the *Kamtschadales* to guard them. Their measures were so well concerted, that it was a singular instance of Providence that any of the *Russians* were preserved; for if they had once been driven intirely out of the country, it would have been difficult for them to have re-established themselves. The counsels of the *Kamtschadales* were far from being such as one would expect from savages; they endeavoured to prevent any correspondence with *Anadirsk*, and kept a strong guard upon the sea-coasts, where they might seize upon any of the *Russians* that arrived. The chief authors of this rebellion were one *Yalofski Toyon*, or chieftain called *Fetka Harchin*, who had frequently served the *Russians* as an interpreter, and a chieftain of the *Klutchefski*, called *Chugotche*.

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While this conspiracy was in agitation, the commissary *Skacurdin* was on his departure from *Kamtschatka*, with a considerable party to guard the tribute. They had sailed from the mouth of the river *Kamtschatka* towards *Anadir*, but soon after contrary winds obliged them to return. The *Kamtschadales*, informed of their departure, and ready for the revolt, gathered together, and sailing up the river *Kamtschatka* killed every *Russian* Cossack they could find, burned their summer huts, and carried off their wives and children into slavery. Their chief strength was directed against the fort; where arriving in the night, they set fire to the priest's house, concluding that the fire would bring out all the inhabitants. In this they succeeded too well, murdering almost every person, without sparing either sex or age. They burned all the houses, except the fortifications and church, where the goods both of the pub-

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lick and private people were kept. Those who escaped this massacre fled to the mouth of the river, and carried the news to their countrymen, who had not yet left the coast. When the *Klutchefski* chief, *Chugotche*, heard of the taking the lower *Kamtschatka* fort he marched thither, killing or taking prisoners all the *Russians* he met with; and joining *Harchin*, he informed him that the *Russian* vessels were yet upon the coast, for which reason he judged it proper to strengthen themselves in the fort; and sending accounts of their success to all their countrymen, ordered them to join him. The next day they divided all the plunder, and dressed themselves in the *Russian* habits; and some of them, putting on the priest's robes, celebrated their own religious ceremonies and conjurations. *Harchin* ordered a new-baptised *Kamtschadale*, who had learned to read *Russ*, to say mass in the *Russian* manner, and dressed in the priest's robes; for which he made him a present of 30 red fox-skins.

The 3d day after the taking of the fort arrived a *Russian* skipper, *Yacob Hens*, with 60 Cossacks, who was sent with a design to recover the fort from the rebels. He endeavoured by all methods to persuade them to return to their duty, assuring them of a general pardon; but they would not give ear to him: nay, *Harchin*, their chief, told him that he had no business there, and that he was commissary of *Kamtschatka*, and would himself gather the taxes, so that they did not want any Cossacks among them. Upon which *Hens* sent to his vessels for some cannon, and began on the 26th of *July* to fire upon the fort, where he made a very large breach, which caused great confusion amongst the besieged, and gave an opportunity for the women that were prisoners to escape. *Harchin*, finding it impossible to defend the fort, made his escape disguised in women's cloaths; and although he

was

was purſued by ſeveral, yet he made ſuch expedition that they could not overtake him. After this 30 of the beſieged who remained ſurrendered themſelves; but a *Klutchefſki* chieftain, *Chugotche*, with a few people that joined him, held out to the laſt man. During their defence the powder magazine was ſet on fire, which reduced the fort and all the riches in it to aſhes. In this ſiege the Coſſacks had four men killed, and a great many wounded. How many of the *Kamtſchadales* were killed was not known, their bodies being conſumed in the fire; not one eſcaped alive, for thoſe who ſurrendered were killed by the Coſſacks, in revenge for the loſs of their wives and children.

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The ſudden return of the *Ruſſian* party was the occaſion that this revolt was ſo eaſily quelled; for it prevented their aſſembling in ſuch numbers, as they otherwiſe would have done. However, it was not yet intirely over, for *Harchin*, with ſome other chieftains, collected a good number of people together, and reſolved to march to the ſea ſide, and attack the *Ruſſian* veſſels which were there. But, in the very beginning of his march, he was met by a party of *Ruſſians*, which obliged him to fortify himſelf upon the left ſide of the river *Kluchefka*; the Coſſacks encamping upon the right, ſeveral ſkirmiſhes enſued between them. When *Harchin* ſaw that he could not accompliſh his deſign, he propoſed to treat with the Coſſacks, and offered to come to their camp, if they would ſend one Coſſack as an hoſtage for him; which they granted. He demanded, That they ſhould not intirely ruin the *Kamtſchadales*, and promiſed that for the future they would all live peaceably, only deſiring that they would allow him to go and prevail upon his friends and relations to conſent to this agreement; which being granted, he ſent word, that he could not prevail with them to make peace; and that even his own brother, and a chieftain, *Javatche*, who had accompanied them, had refuſed to return.

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175 The next day *Harchin* came to the bank of the river with ſome
669 other chiefs, and deſired, that the Coſſacks would ſend a
R. boat to bring him over, and give him two Coſſacks in hoſtage;
177 which they agreed to: but no ſooner was he come over
.17 than they made him priſoner, and ordered the hoſtages to throw themſelves into the river, and ſwim over, while they fired upon the *Kamtſchadales* on the oppoſite bank, who, when their chief was made priſoner, preſently ſeparated; but, being purſued by different parties, moſt of them were deſtroyed. The chieftain *Teghil*, having defended himſelf a great while, at laſt murdered his wife and children, and killed himſelf; the chieftain *Chugotche*, in vain ſolliciting the inhabitants upon the river *Koſeretſha Shapina* to join him, was in the end murdered by them. After this rebellion, which appeared at firſt very dangerous, and threatened the intire deſtruction of the Coſſacks, was quieted by the arrival of ſuccours, things continued in pretty good order at *Kamtſchatka* until the year 1740, when the *Ruſſians* had ſeven people killed by the natives.

When this rebellion was over, orders were ſent as ſoon as poſſible to Major *Merlin*, with another officer and ſome regulars, together with Major *Paulutſkoy*, to inquire into the cauſe of this rebellion, and the murder of the *Japaneſe*, and to ſend the report thereof to *Jakutſki*; he was at the ſame time to build a new fort, which he did a little lower than the mouth of the river *Ratuga*: this was called the lower fort of *Kamtſchatka*. Having examined into the cauſe of the rebellion, three of the *Ruſſians* were found guilty of death and executed; and two of the chief rebels, with ſome others, both Coſſacks and *Kamtſchadales*, were puniſhed. All the natives, whom they had either taken priſoners, or had made ſlaves of, were reſtored to their liberty. Thoſe *Kamtſchadales* who were put to death, ſeemed to go to execution without the leaſt concern, and under the torture they were ſcarcely heard to moan; nor could they force them to confeſs any thing more than what they had done ſeſs voluntarily before.

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fefs any thing more than what they had done voluntarily before. 651

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity. 692 797 R. 177 .65

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.* 361 R. 177 .71

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Tegbil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

361 different buildings; the entrance into the fort is by a ſmall
663 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe, for ſelling brandy, and a diſtillery. There are about 45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

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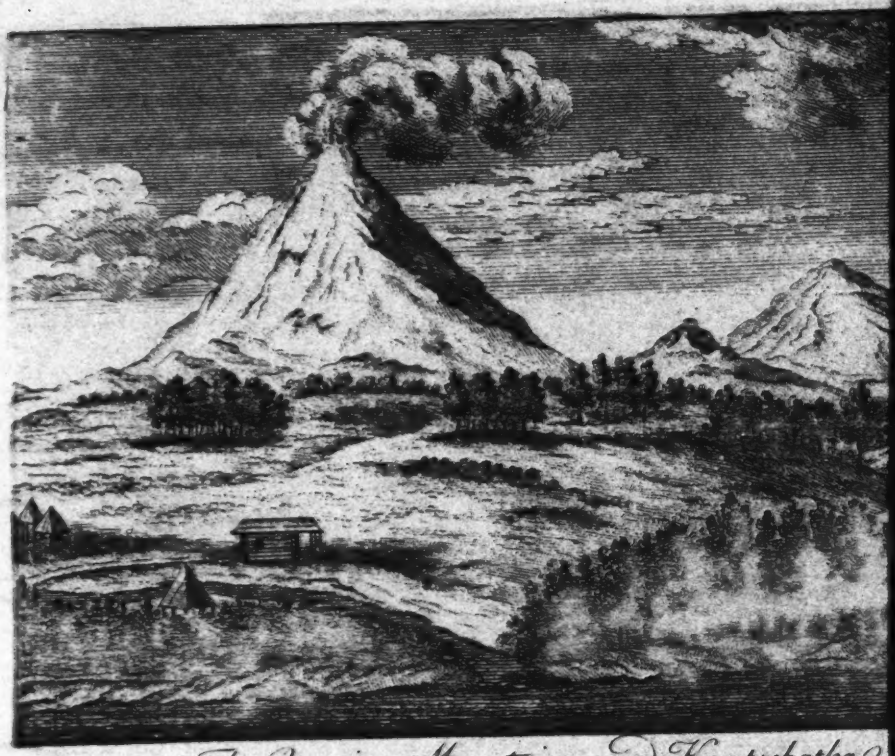

The Burning Mountain named Kamtschatka.

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R.
177
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The Lower Kamtschatka Fort.—

Facing P. 265

The upper fort of *Kamtſchatka* was the firſt built, and 361
for ſome years reckoned the principal, as the chief commiſſary 563
lived there. It ſtands upon the left bank of the *Kamtſchatka*, R
near the mouth of the little *Kaly*, about 69 verſts from the riſe of 177
the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſche-* .17
retſkoi fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being 137
here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery 136
is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper 361
fort, and ſtands upon the ſame ſide of the river, about 30 verſts R
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from its mouth. The fort is a parallelogram made with paliſades; its breadth is 40, and its length 42 fathoms. In the fort is a church dedicated to the Virgin *Mary*, the office and magazine for the taxes, ſtores, and the commiſſary's houſe. Theſe are all built of larch wood, and much neater than in any other fort. Without the fort are 39 private houſes, beſides the publick houſe and diſtillery. The male inhabitants are 92, of all ranks.

This fort, with regard to the neceſſaries of life, may be reckoned preferable to any other. Here the inhabitants catch plenty of fiſh, which they dry and ſalt in ſufficient quantities for proviſion through the whole year: here they have wood enough, not only for building their houſes, but alſo for building ſhips, to which the river ſerves as an harbour; and by its proximity to the ſea they boil ſo much train oil and ſalt as to ſupply the other forts. Game is here ſo plenty, that the pooreſt Coſſack ſeldom dines without a ſwan, gooſe, or duck; and through the whole winter, in the ſprings, they catch freſh fiſh. Wild berries of all ſorts are here in great abundance, which the inhabitants lay up in ſtore for the winter, and which next to fiſh is the greateſt part of their ſuſtenance; and the beſt *Kamtſchatka* ſables are caught near the river *Tegbil*. All the goods which they get from the *Koreki*, ſuch as deer-ſkins, and even the fleſh of the deer itſelf, are cheaper here than any where elſe: beſides, this is a moſt fruitful ſoil, where they may cultivate corn of all ſorts. The only inconvenience that they have is, that both *Ruſſian* and *Chineſe* goods are dearer here than at any other fort, which is owing to their land-carriage from the *Bolſcheretſkoi Oſtrog* hither, which coſts four rubles a pood.

The fourth fort was built upon the bay of *Awatſcha*, in the year 1740; and inhabitants were brought hither from the upper and lower *Kamtſchatka* forts. The houſes are tolerably good, particularly thoſe which were built for the people of the *Kamtſchatka*

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chatka expedition upon the haven of *Petropaulauſkay*. Its great beauty is its church, which is finely ſituated, and very well built. This fort has almoſt the ſame advantages and diſadvantages as the *Bolſcheretſkoi* fort, with this difference, that here the hunting of the beaver is more convenient; but the water is bad and unwholſome, ſo that they ſend frequently from this bay to the river *Awatſcha* for their freſh water.

We can give no account of the fifth fort, which was built upon the river *Tegbil* after my departure from *Kamtſchatka*. It was garriſoned with 37 male inhabitants. Mr. *Steller* tells us, that this fort was built with a view to reſtrain the ſettled *Koreki*, and for a ſtage to thoſe who travel round the *Penſchinſka* ſea to *Ochotſka*; and, in caſe of neceſſity, to protect the rein-deer or wandering *Koreki* againſt the *Tchukotſkoi*. The inhabitants of this fort can deprive thoſe of the lower *Kamtſchatka* fort of ſeveral advantages, becauſe they lie more convenient for hunting the ſable upon the river *Tegbil*, and the *Koreki* rather chuſe to bring their goods to them than to the two other forts, as being nearer.

CHAP. VI.

Of the Manner in which the Coſſacks live there; of their DISTILLERY, PROVISIONS, *&c.*

THE Coſſacks of *Kamtſchatka* live almoſt in the ſame manner as the natives, feeding like them upon roots and fiſhes; and their occupations are nearly the ſame. In the ſummer they catch fiſh for their winter proviſion, and gather nettles, of which they make nets. Their difference only ſeems

563 to consist in this, that the Cossacks live in houses, and the natives in huts under ground; the Cossacks usually eat their fish boiled, and the natives mostly dry; besides, the Cossacks dress their's several ways different from the natives. As it is impossible for people to live there without the help of women, who are so necessary in many parts of their work, such as cleaning their fish, drying their roots, spinning and making their shirts and cloaths, and as the Cossacks first settled in *Kamtschatka* without their wives, whom upon account of the difficulty of the journey they could not transport thither, I shall now relate what methods they used to make up for this deficiency.

144 One may easily imagine, that the Cossacks did not reduce these
563 people without using force; and in these wars they took pri-
177 soners many women and children as well as men, and obliged
567 them to perform all the labour. The care of overlooking these servants was entrusted to such as they made their concubines, whom they frequently married if they had any children by them; and sometimes the natives offered them their daughters, whom they promised to marry as soon as the priest arrived: so that it sometimes happened that the Cossacks had a marriage and christening at the same time; for then there was but one priest in all *Kamtschatka*, who lived in the lower fort, and once in a year, or once in two years, visited the other settlements.

563 The Cossacks, a people rude enough themselves, seemed to be
567 pretty well pleased with the manner of living here, using the natives as their slaves, who furnished them with sables and other furrs in abundance, and passing the greatest part of their time in playing at cards: their only want seemed to be that of brandy. Before there were any brandy shops they used to meet in the office where the tax was received: here the gamesters brought their furrs, and, when they had no furrs, even their slaves; and

and ſometimes they played 'till both parties had pawned their 563
cloaths for brandy. Such way of living, one may eaſily believe, 567
was attended with great confuſion; but what the poor ſlaves ſuf-
fered is almoſt incredible, being obliged ſometimes to change
their maſters twenty times a day.

The invention of making ſpirits happened accidentally. The 563
Coſſacks, after the manner of the natives, made a great proviſion
of all kinds of berries for the winter. It happened ſometimes
that they began to ferment in the ſpring, and could be uſed no
other way than in drink. This drink was obſerved to cauſe
drunkenneſs when taken in great quantities; upon which they
began to diſtil it, and, to their great ſurpriſe and pleaſure,
found that it produced a good ſpirit. They have ſince diſco-
vered that they could make brandy from an infuſion of the
ſweet graſs, and now they have ſpirits in plenty. Their method
of preparing this herb for diſtillery we have already explained.

Thoſe that are curious to know whence the Coſſacks ſettled 563
here obtained their riches, muſt be informed that they owe them 661
to the following circumſtances: firſt, when they conquered the 651
natives they made all the plunder they could: ſecondly, every 439
party of Coſſacks, that was employed in gathering the taxes, R.
obliged each tributary native, beſides the crown tax, to give them 177
four fox-ſkins and one ſable, which they divided among them- 165
ſelves: thirdly, by their commerce with the natives, whom they
obliged to pay a very high price for every trifle they furniſhed
them with. Although, at preſent, the Coſſacks are forbidden
to take any thing more than the crown tax, yet they are ſtill
allowed to ſet what price they pleaſe upon their goods; and
indeed they ſell them, or change them for furrs, at very great
profits, and ſometimes for proviſions, nets, and boats. Without 563
this they would not be able to live upon their ſmall pay, which
is no more than what they uſed to receive at *Jakutſki*, and,
both in money and proviſions, does not amount to above 14
rubles

rubles a year; and here they cannot maintain and cloath themselves for less than 40.

CHAP. VII.

Of their TRADE.

ALTHOUGH from the very beginning some people went along with the tax-gatherers, who carried little trifles to dispose of among the natives, these people could not be called merchants, because they did duty in the same manner as the Cossacks. By degrees many of them got themselves enrolled under that name, on paying the poll-tax, and as such settled with their families in these places; but the true merchants began to bring considerable quantities of goods first to *Ochotska*, and then to *Kamtschatka*, at the time when the second expedition to *Kamtschatka* took place. The number of the people increasing made the demand greater; and their profits were so considerable, that several, who came out of *Russia* as common labourers, in six or seven years began to trade for 15000 rubles or more: but, on the other hand, some were ruined from their extraordinary gains, which led them into various sorts of luxury and extravagance: and those merchants particularly who sent factors thither run the greatest risk; however, the principals had the satisfaction to find that the government took care to see justice done them.

After the expedition to *Kamtschatka* the trade began to be upon another footing, the officers and servants in this expedition buying their goods of the merchants for ready money; whereas they were obliged to give the inhabitants credit 'till they returned from their travelling among the *Kamtschadales*, when they were paid

paid in furrs of different ſorts. In fine, the exchange of goods 563
with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, not- 441
withſtanding all expences occaſioned by the diſtance, dearneſs of
tranſport, and other difficulties, we may reckon that a 1000
rubles will produce 4000, provided they remain but one year in
Kamtſchatka; but if they remain longer, there is a conſiderable
loſs. The reaſons of this are, firſt, that upon their arrival, being
flattered with the high prices of things, they ſell every thing, even
their own cloaths and proviſions, hoping ſoon to leave the country,
in which if diſappointed, they are obliged to buy them back
again at double price: ſecondly, that the furrs by lying, loſe their
colour and value: thirdly, that the place is exceſſively expenſive
in regard to lodging, warehouſe-room, victuals, and ſeveral other
particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce 439
of *Ruſſia*, are *European* goods, from *Siberia*, *Boharia*, and the
Calmuks. From *Europe* they receive coarſe cloaths of various
colours, linen, ſerges, knives, ſilk and cotton handkerchiefs,
red wine, a little ſugar, tobacco, and ſeveral toys. From
Siberia, iron, ſeveral iron and copper veſſels, and inſtruments,
ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp,
yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth.
From *Boharia*, and the country of the *Calmuks*, they bring ſe-
veral different ſorts of cotton goods. From *China*, ſeveral ſilk
and cotton ſtuffs, tobacco, coral, and needles, which are much
preferred to thoſe from *Ruſſia*. From the *Koreki* they receive
great quantities of rein-deer-ſkins, both dreſſed and undreſſed,
which they may ſell in what quantities they pleaſe at any
time. Merchants muſt take care not to have too great a ſtock 437
of any other goods; for the inhabitants of this place, *Ruſſians* 511
as well as natives, never buy any thing before they are in abſolute
want of it, even if they could buy it at half price.

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441 The goods ſold at *Kamtſchatka* at prime-coſt ſcarcely exceed 10 or 12,000 rubles, but the ſales amount to 30 or 40,000 rubles; and if a merchant carries theſe *Kamtſchatka* goods to the fair upon the frontiers of *China*, he may receive double the price he buys them at; ſo that this commerce may eaſily appear to be very advantageous.

439 The goods that are brought out of *Kamtſchatka* conſiſt of furrs,
651 ſuch as ſea beavers', ſables', foxes', and a few otters' ſkins. As
437 there was formerly no money in this country, the way of trading was in exchange for furrs; and now they have money, they fix the price by the ſkins, reckoning a good fox-ſkin at a ruble. All goods brought out of *Kamtſchatka* pay 10 per cent. duty, but the ſables 12.

CHAP. VIII.

000 *The Different* ROADS *between* Jakutſki *and* Kamtſchatka.

THOUGH it may at firſt appear needleſs to mention all the different roads to *Kamtſchatka*, eſpecially as ſeveral of them are now no more uſed, yet, upon due conſideration it will be found to ſerve for an illuſtration of the different ſettlements of the *Ruſſian* colonies, and to ſhew what people are ſubject and pay taxes to each of theſe ſettlements. It will alſo explain the manner of reducing theſe people and making them tributary, and deſcribe the difficulties of this journey, although there had been no danger from an enemy, in which the tax-gatherers were continually expoſed to hunger and cold in an unknown country, whereby many of them loſt their lives. The Coſſacks were only able to make this journey

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journey during the winter, and had no other provisions or stores than what they dragged after them upon small sledges: and as they were obliged to go through great wastes, where sometimes by reason of the drifts of snow they were forced to stay several days in the same place, their provisions were entirely consumed; so that they were obliged to eat their leathern belts, straps, and shoe-soles. It is a thing incredible that a man upon the road could live 10 or 12 days without victuals, and yet in *Kamtschatka* they pretend that this has frequently happened to several.

From *Jakutski* the road to *Kamtschatka* was down the river *Lena* to its entrance into the Frozen Ocean, and thence by sea to the mouth of the river *Indigirka* and *Cova*, from whence they proceed over land to the *Penschinska* or *Olutorskoy* sea, and coast it round by the shore in boats. However this road was attended with great inconveniences; for in the best season, when the sea was free from ice and the wind favourable, they could not perform it in less than one year; but if the one happened to be contrary, or the other frozen, their boats were frequently broken to pieces, and the voyage cost them sometimes two, and sometimes three years. From *Jakutski* to the mouth of the river *Yani* is 1960 versts. However this road is now entirely disused.

Another passage was all by land: from *Jakutski* they went to the stage of *Aldanski*, from thence to upper *Yanski*; thence through *Zachiversk*, *Uyandski*, *Alaseski*, upper and lower *Covimski*, to the fort of *Anadir*; thence to the lower *Kamtschatka*, and thence to the upper fort upon the *Bolscheretskoi*.

The *Alazinska* stage stands at a good distance from the mouth of the *Alassa* river, which falls into the Frozen Ocean. It is about 509 versts distant from *Uyandinska*.

The *Anadirska* fort lies on the left of the river *Anadir*, about 963 versts from the lower *Kovinska*. From the fort *Anadirska* to the lower *Kamtschatka* is 1144 versts. This is at

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present the common road as far as *Anadirſka*, but ſeldom to *Kamtſchatka*, unleſs it be neceſſary to viſit the different poſts.

A third paſſage is moſtly by water. They ſail down the *Lena* from *Jakutſki* to the conflux of the river *Aldan*, up the *Aldan* to the mouth of the river *Mai*, up the *Mai* to the entrance of the river *Judoma*, and up the *Judoma* as far as the place called the croſs of *Judoma*; from thence over land to *Ochotſka*, whence they go in boats to the *Bolſchaia-reka* or Great River, or by land along the coaſt of the *Penſchinſka* bay: but the laſt is not quite ſafe upon account of the *Koreki*, who are frequently in rebellion. However, this paſſage up the rivers to the croſs of *Judoma* is very tedious; and it is reckoned a piece of good fortune to make the paſſage in one ſummer: there are likewiſe ſeveral troubleſome water-falls in this paſſage.

The fourth, and moſt convenient road in the ſummer-time, lies over the hills; and as I travelled this myſelf, I ſhall give my own journal, which perhaps may be of ſome uſe in laying down the geography, the common maps wanting moſt of the rivers in this part.

From *Jakutſki* they go down the river *Lena* to *Yarmunka*, where they prepare themſelves for their journey. The next place to this is *Kumatki*; we then paſſed ſome villages, and the following day croſſed the river *Sola*. This river riſes about 100 verſts from the ridge, and falls into the *Lena* about ſix verſts below where we paſſed it. We fed our horſes by the lake *Kutchugna*, about 11 verſts beyond the *Sola*; and lodged upon the lake *Oryoncamus*, 13 verſts from the laſt place. The 3d day, paſſing the lake *Hatila*, we fed our horſes upon the lake *Arelaka*; and lodged that evening upon the lake *Talba*. In about 14 verſts from *Talba* we began to aſcend the ridge; paſſing which, we went through the deſerts *Quubalag*, *Keindu*, and fed our horſes by the lake *Satagg*, 20 verſts diſtant from *Talba*. We came next to the lake *Ala-atbaga*, where we lay that night.

In

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In a few verſts from *Ala-athaga* we came to the little river *Kocora*, which, 22 verſts below the place where we paſſed it, falls into the river *Tata*: we went down to its very mouth. There are ſeveral lakes near it; and a verſt before we came to the laſt is a ſtation where generally the horſes are changed, and where cattle are bought for ſuſtenance in paſſing the deſerts. Every traveller buys ſome in his turn, which are divided equally among all the company. They endeavour to purchaſe them as ſmall as they can, that every one may only have ſuch a portion as he can conſume; for even though roaſted or baked it is preſently filled with maggots. This ſtation is kept by Coſſacks ſent from *Jakutſki*: it lies 15 verſts from the place where we paſſed the river *Kocora*. Having lodged here one night, we ſet out next morning, and paſſed the lakes *Emiti* and *Talbachan*, about one verſt and a half from the mouth of the *Kocora*. Then we travelled through the deſerts of *Karakoi* and *Tetaca*, and lodged that night by a little lake. Our road was near the ſide of the river *Tata*: this day we travelled about 15 verſts. The places that we remarked beyond this were, the deſerts of *Choraita*, *Menay*, *Koratoi*, *Tavalac*, and *Suſun*, and the little river *Tula*, which falls into the *Tata* about four verſts below where we paſſed it, and 13 diſtant from where we lodged the night before. Thirteen verſts from *Tula* the river *Namgare*, after a courſe of about 60 verſts, falls into the *Tata*. Between theſe two rivers are lake *Cungi*, and the deſerts *Sadochta* and *Betegeti*. Beyond the *Namgara* lies the lake *Neerga*, and the waſte places *Kalachku*, *Boorgunechtec*, and *Taalgeram*. Two verſts from the *Tata*, and 14 from *Namgara*, is the ſtation *Jockſovanſka*, kept by Coſſacks from *Jakutſki*: here we lodged. Travelling about four verſts and a half we paſſed the river *Tata*, which, as we were told by the people, riſes there about 150 verſts above our paſſage, and about as much below it falls into the river *Aldan*. Four verſts beyond the *Tata* we paſſed the little river *Lebagana*, which

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runs into the *Tata*. Between these rivers lies the lake *Yeleyegnok*. Half a verst from the river *Lebagana* we passed the river *Besurac*, which a little below falls into the *Lebagana* upon the right hand. Five versts farther is the river *Badaranac*, which falls into the *Besurac*. Passing a ridge we came to the spring of the river *Tuguta*, which, after a course of 30 versts falls from the left into the river *Kamgal*. The passage over the ridge is three versts. Going down the left side of the river *Taguta* we saw the lake *Utal*, and passed the river *Kirtak*, which falls into the *Taguta* five versts from its spring. Two versts and a half from *Kirtak* we lodged upon the lake *Besictaki*: from this lake to the ford of the river *Amga* is 18 versts. We crossed the river *Besurac*, which falls into the *Taguta* upon the left, and passed by the lakes *Mycharelac* and *Taguta*, near which are other lakes, *Taraga*, *Maralac*, and *Melca*. Half a verst from *Melca* is the passage over the river *Amga*, which is about 40 or 50 fathoms broad, and falls into the *Aldan* about a verst and a quarter below the passage. Between the mouth of the river *Amga* and *Tama* is about 119 versts. This river is remarkable, by having several people settled here for agriculture: however they have made very little progress; nay, they have even forgot their native language, and have acquired the language and customs of the *Jakutski*; so that they can be distinguished in nothing but by their being Christians. Here we were obliged to wait all night for the ferry. The next morning we went up the other side of the *Amga*, and about two versts from the ferry we came to the little river *Ulbuta*, which loses itself in the *Amga*. We ascended this river to its spring, and then going over to the spring of the *Chuoptchunu*, went down that rivulet to its entrance into the river *Nocha*. The river *Chuoptchunu* runs through the lake *Darka*; and the *Nocha* falls into the river *Aldan* about 120 versts from its rise. From the *Nocha* we went 12 versts over a ridge and came to the river *Voroni*, which falls into the *Nocha*.

Two

Two verſts further is the little river *Yilga*, which after a courſe of 20 verſts falls into the *Nocha*: here we lodged. One verſt beyond our quarters is the river *Atctachbatch*, which we aſcended eight verſts; then leaving it, four verſts further we came to the *Chipanda*, along which we went 16 verſts to where it falls into the river *Aldan*. The river *Chipanda* runs through the lakes *Bileor*, *Druk*, and *Chipanda*. The *Aldan* is a large navigable river, which falls into the river *Lena* upon the right ſide, 200 verſts below *Jakutſki*. We paſſed this river in boats: the ferry lies eight verſts above the mouth of the *Chipanda*. From *Yalmanca* to this place the country was full of woods; though the greater part was larch and birch, yet upon the river *Amga* we now and then met with ſome fir-trees, but rarely a poplar. From the *Aldan* we travelled to the river *Bela*, which is 20 verſts. Upon the road we ſaw ſeveral lakes, and the river *Keriatma*, which falls into the river *Aldan*. Here we lodged. The next day our road lay up the river *Bela*, upon which we paſſed the rivers *Sacil*, *Ulac*, and *Lebvena*, where we lay: this day we travelled 20 verſts. The following day we paſſed the river *Argadchika*; and nine verſts further lies the hill *Telabi*, a little beyond which begins the black foreſt: three verſts further we took up our quarters. The next day, upon account of the rain, we did not move before four o'clock in the afternoon. Five verſts beyond the black foreſt runs the river *Hagolla*, and 20 verſts further the *Chagdolla*; both which run into the ſame *Bela*. During this journey we paſſed the river *Bela* three times. As the ſummer had been pretty dry, our paſſage was very favourable, being able to ford it; but in a wet ſeaſon it frequently is attended with great danger. They are obliged to paſs it upon floats, which, by the ſtrength of the current, are frequently driven upon rocks or the trunks of trees. There is great plenty of wood upon the river *Bela*. Our road lay up the *Chagdolla*; in the ſpace of 16 verſts we croſſed it ſeven times. About 15 verſts

verſts from the laſt paſſage we came to the river *Unacam*, which is about 30 fathoms broad, and falls into the *Aldan*. Our road lay along this river to its very riſe. Ten verſts beyond the place where we paſſed it is a little river whoſe name we could not learn; upon which, half a verſt from its mouth, is a lake which they call *Biſkeol*, that is, Icy lake, as the ice in it does not thaw during the greateſt heats in ſummer. It lies between high rocky hills; its length is about 150 fathoms, and breadth 80; The thickneſs of the ice is about two feet, and it appears like the ſpring ice, bluiſh and full of holes. Here it is always cold in the hotteſt day. We now travelled 20 verſts over the hills, and came again to the river *Bela*, which we paſſed. Next day we travelled eight verſts further, and came to the head of the *Akera*, which falls into the *Yuna*: Our road lay ſeven verſts along this river. Then we aſcended the river *Yuna*, and paſſed it about 18 verſts from the *Akera*: this river falls into the *Aldan*. Next day we paſſed the river *Antcher*, and lay this night by the *Terrene*, or the little ice magazine, about 200 fathoms long and 50 broad. Five verſts from *Terrene* is another ice magazine, which is ſeven fathoms long and three broad; and ten verſts further, all upon the ſame river, is yet a third; five verſts from which laſt is the riſe of the river *Akachon*, which falls into the *Yuna*.

From *Yalmanka* we departed the 9th of *July*, 1737, and arrived at *Ochotſka* the 19th of *Auguſt*. We reſted ſeven days upon the road, and travelled thirty-four. It may be ſaid, in general, from *Jakutſki* to the ford of the river *Bela* the road is tolerable; but from thence to *Ochotſka* as troubleſome as one can eaſily imagine, lying always upon the ſteep banks of rivers, or through thick woods: The banks of the rivers are full of looſe round ſtones, ſo difficult to paſs, that it is ſurpriſing how the horſes can travel over them. The higher the hills, the more miry they are; and on the very tops of them are ſuch bogs and ſloughs, that if a horſe breaks the ſurface he ſinks without any poſſibility of recovering

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covering him: it is terrible to ſee the earth bending like waves for ten fathoms round one. The beſt time of travelling from *Jakutſki* is from the beginning of ſummer until the month of *July*; for if they wait 'till *Auguſt* they are in danger of being ſurpriſed by the ſnow, which falls very early on the mountains.

We took our departure from *Ochotſka* on the 4th of *October*, in the Fortuna packet-boat, which had failed thither from *Kamtſchatka*. At night there was ſuch a leak in our veſſel, that the people below were up to their knees in water; and though we worked with two pumps, and baled it with kettles and pans, and whatever fell in our way, yet the water decreaſed very little: beſides our veſſel was ſo heavily laden that it came over the gunnel. We had therefore no other means of ſaving our lives than by lightening the veſſel, for at this time there was a dead calm; ſo that all upon deck, or about the ſides of the ſhip, was immediately thrown overboard: but as this produced very little advantage, about 400 pood was caſt out of the hold, which relieved us; the water in the veſſel began to decreaſe, and at laſt was intirely cleared, However, the pumps were ſtill kept going, and no body except the ſick were excuſed: in this manner we ſailed 'till the 14th of *October*. Beſides the continual fatigue of pumping we were expoſed to violent cold and continual ſleet. This day at nine in the morning we arrived at the mouth of the *Bolſchaia-reka*; but, as if all our voyage was to be unfortunate, our ſailors, not knowing whether the tide was ebbing or flowing, miſtook the ebb for the flood, and ran into the mouth of the river. They were no ſooner come to the broken water, which is very great at the beginning of the ebb or flood even in the calmeſt weather, and was at preſent much increaſed by a ſtrong north wind, than we loſt all hopes of advancing up the ſtream. It was therefore the opinion of ſeveral, that we ſhould go out again to ſea, and wait the time of the flood: but lucky was it for us that we did not purſue this reſolution; for during the whole

week

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week following there was ſuch a ſtrong north wind we ſhould in that caſe have been driven ſo far out to ſea that we muſt all have periſhed: but the majority inſiſted on running the veſſel on ſhore, which we did about 100 fathoms ſouth of the mouth of the river. In the evening, at the next high water, we took out the maſt, and the following day ſeveral planks; the reſt was ſtove to pieces, and carried away by the ſea. Now we could obſerve in what danger we had been, for we found all the planks of the veſſel quite black and rotten.

We lived upon the coaſt 'till the 21ſt; and during our ſtay there happened an earthquake, but ſo inconſiderable that we hardly knew of it, but imputed the motion we obſerved to our having been toſſed ſo long at ſea: however, ſome *Kuriles* who came down informed us, that in the place of their habitations it had been very violent, and that the water roſe exceeding high. On the 21ſt of *October* we entered the *Bolſchaia-reka* in boats that were ſent to us from the fort, and on the 22d in the evening we arrived at the fort.

Notwithſtanding that the journey from *Jakutſki* to *Kamtſchatka* is very troubleſome, yet the return is tolerably agreeable; for the veſſels that winter at *Kamtſchatka* depart early in the ſummer, when the weather is generally fair and the days long; and at that time one can go by water even to the ferry of the river *Bela* or the *Aldan*, and from thence on horſeback to *Jakutſki*. The only trouble that they have is before they come to the croſs of *Judoma*.

In my return I came from *Ochotſka* to *Judoma* in ſeven days, and from thence to the mouth of the *Mai* in five days, and from thence to *Jakutſki* in five days more; ſo all together make 17: however, upon account of the rapidity of the ſtream, the paſſage up the *Uda*, which I have made in five days, ſometimes coſts five or ſix weeks.

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BY

WALDEMAR JOCHELSON

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PREFACE

121 In 1925 the Carnegie Institution of Washington published my report, *Archæological Investigations in the Aleutian Islands*. The present work deals with the archæological investigations in Kamchatka, based on fieldwork conducted by the author in 1910–1911 at the expense of the late F. P. Riaboushinsky, Moscow banker, and under the auspices of the Imperial Russian Geographical Society. Both works form a part of the results of the author's studies as a leader of the Ethnological Division of the so-called Kamchatka Expedition, and may be regarded as publications, in English, of the Russian expedition. The reasons for the study of the Aleutian Islands by the Ethnological Division of the Kamchatka Expedition are given in my work *Archæological Investigations in the Aleutian Islands* (page 2).

113 The leaders and members of the other divisions of the expedition, who worked in Kamchatka only, are still working out their material. The following publications have appeared in Russian. Professor P. J. Schmidt, member of the Russian Academy of Sciences and leader of the Zoological Division, published the first volume of *The Zoology of Kamchatka*, Moscow, 1916 (1–432 pages, 4°). Professor V. L. Komarov, member of the Russian Academy of Sciences and leader of the Botanical Division, published the first volume of *The Vegetation of Kamchatka*, Moscow, 1912 (1–458 pages, 4°). Dr. V. A. Vlasov, the chief of the Meteorological Bureau of Moscow and leader of the Meteorological Division, published Volume I, Part 1, *The Climate of Kamchatka;* Part 2, *Kamchatka's Waters*, Moscow, 1916 (I–VII, 1–370 pages, 4°).

The above Russian publications of the Kamchatka Expedition were not written by the division leaders alone, but there are also contributions by their assistants, fifteen in number, specialists in different branches of zoology, botany, geology and meteorology.

The leader of the Geological Division, the mining engineer and member of the Geological Survey of Petrograd, S. A. Konradi, has published only a brief account of his investigations of the Kamchatka volcanoes. After the revolution of October 1917 in Russia he proceeded to Prague, Czechoslovakia, where he now lives.

113 The following material of the writer has not yet been published: grammars on
128 the Aleutian and Kamchadal languages, and material on the folklore, history, anthropology, ethnology and sociology of the Aleut and Kamchadal. A handbook by the writer on the anthropology and ethnology of the peoples of Asiatic Russia and adjacent countries is now in print by the American Museum of Natural History in New York, and a volume on the Yakut people of Siberia (prehistory,

5: Jochelson A-5 (1910-11) 1928 Kamchadal

113 history, anthropology, language, folklore, ethnology and sociology) is now in pre-
128 paration for the publications of the American Museum.

The specimens described in this book are on exhibition in the Central Museum for Ethnography (former Count Rumiantzev's Museum) in Moscow.

128 Acknowledgment is made to Professor B. M. Sokolov, the Director of the Central Museum for Ethnography in Moscow, and his assistant, Dr. B. S. Shukov, who supervised the work of illustrations; to the mineralogist, Professor A. G. Titov of the Moscow University, who determined the stone material for implements and weapons; to the scientific collaborator of the Central Museum, Madame E. I. Goryunova, and the artist, Mr. Gutentag, who made drawings from specimens of the Kamchatka collection; to the photographer of the Central Museum, Mr. P. N. Bashirov, for the photographs taken of specimens in the Central Museum.

Mr. N. N. Krijanovsky of the staff of the American Geographical Society in York made drawings of the map showing the distribution of the palæolithic, neolithic, bronze and iron stations in Northern Asia and the map of Kamchatka Peninsula.

Mrs. Jochelson, as a member of the Ethnological Division of the Kamchatka Expedition, assisted me in excavating ancient Kamchadal village sites and in taking photographs during our fieldwork. As a Doctor of Medicine she made herself useful by treating the numerous Kamchadal patients.

Finally the author is under obligation to the American Museum of Natural History in New York for assistance in clerical work and for putting at his disposal office room while writing this report.

WALDEMAR JOCHELSON.

American Museum of Natural History,
New York, March 27, 1928.

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ARCHÆOLOGICAL INVESTIGATIONS IN KAMCHATKA

CHAPTER I

HISTORY

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In 1632 the Russian conquerors of Siberia settled on the Lena River and built a fortified town, Yakutsk, which they used as a central base for further military expeditions. In the course of these expeditions they reached Okhotsk and Bering Seas on the east, the Arctic Ocean on the north and the Amur River on the south.

In the year 1649 the fortress Anadyrsk, on the river of the same name, was founded by the Cossack Deshnev, who had traveled in boats from the mouth of the Kolyma River through Bering Strait to the mouth of the Anadyr River.

Since the founding of the fortress Anadyrsk, Cossack parties have imposed tribute on the Koryak living to the south of Anadyr. From the Koryak the Cossacks learned that the best peltries, such as sables, sea otters (*Enhydris marina*), and sea bears (*Otaria ursina*) were obtained by the Koryak themselves through exchange from Kamchatka. This discovery led to an expedition to the Kamchatka Peninsula.

In 1696, Atlassov, commandant of the fortress Anadyrsk, sent a detachment under the command of the Cossack Morozko to the peninsula of Kamchatka to verify the reports of its wealth in peltries. The following year, Atlassov undertook the journey himself. He sent Morozko with his detachment to the Bering Sea, while he advanced along the coast of the Penshina Bay, gathering tribute from the crossing country. Morozko did likewise on the coast of Bering Sea. Atlassov and Morozko met on the Tighil River where the Kamchadal territory begins. They advanced together, reached the Kamchatka River, received tribute from the Kamchadal who were living in the valley of the Kamchatka River, and founded the fortress Verkhne-Kamchatsk.

Thus the conquest of Kamchatka was begun. When the Russians had settled in Kamchatka, the Peninsula, as well as the Koryak territory to the north of it, became dependent upon the fortress Anadyrsk. The sea route from Okhotsk to Kamchatka was at that time unknown, and the land journey through the territory of the turbulent Koryak was considered quite impossible. In those days Kamchatka was the most valuable acquisition of the Russian Government in the Far East, and communications of the Yakutsk Administration with Kamchatka

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had to be maintained over a long and dangerous route. The way from Kamchatka to Yakutsk lay through the entire Koryak country to the Anadyr River; from there to the Kolyma River over the Stanovoi Mountain; and from there the route lay over the Indighirka and the Yana countries and the Verkhoyansk range of mountains. A great number of the Cossack parties, which started from Kamchatka with tributes of furs, never reached the fortress Anadyrsk. The Koryak killed the Cossacks from ambush and kept the furs. Transports, that had safely reached Anadyrsk, would arrive in Yakutsk three years after they had left Kamchatka. Cossack detachments carrying provisions, gunpowder, arms and cannons from Yakutsk to Kamchatka were also harassed by Koryak attacks. To put an end to such conditions a direct sea-route from Okhotsk to Kamchatka had to be discovered, and the Koryak had to be finally subdued in order that the winter route might be rendered safe.

Until the sea-route from Okhotsk was discovered, the Cossacks of the Kamchatka Peninsula tried to utilize the Pacific Ocean route to shorten the dangerous land trip from Kamchatka to Anadyrsk. They built large boats of boards, and starting from the mouth of the Kamchatka River traveled northward to the mouth of the Alutor River. In 1752, in order to facilitate these expeditions, the Cossacks built a settlement, Alutorsk, protected by a wall, at the mouth of the Alutor River, where Cossack parties could find shelter against the attacks of the Alutor Koryak. During the winter, Cossacks traversed the tundra from the fortified settlement, Alutorsk, to the mouth of the Oklan River, a tributary of the Penshina River, on which a fortress, Oklansk, was built. From Oklansk they traveled northward along the valley of the Penshina River and, having traversed the Nalghinsk Mountains, arrived at the Anadyr River. That part of the way from Kamchatka to the Anadyr which lay between Alutorsk and Oklansk was of course not safe from unexpected attacks of the Koryak.

The unsuccessful attempt of 1712 to reach Kamchatka by sea from Okhotsk was followed in 1713 by a special ukase of Peter I, ordering that a sea-route to Kamchatka be found. All attempts, however, failed until 1716, when a successful journey was made from Okhotsk to Tighil in a large boat. Thus the dependence of Kamchatka on the Anadyr route was brought to a close, and communication between the peninsula and Yakutsk was henceforth carried on directly by way of Okhotsk.

THE BERING EXPEDITIONS

The discovery of a sea-route to Kamchatka gave an impetus to geographical explorations in Bering Sea. In 1726 the first expedition of Bering was undertaken, followed by a second in 1737–45. In the interval between these expeditions, which were scientific in character and had no direct relation to the administration of Kamchatka, the Kamchadal were finally subdued.

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Professor Golder[1] is of the opinion that Peter I, on his own initiative, set on foot Bering's Expedition in order to determine whether Asia is united with or

[1] F. A. Golder, *Russian Expansion on the Pacific, 1641–1850*, Cleveland, 1914, p. 133.

000 separated from America, but there is reason to believe that he was influenced by the German philosopher, Leibnitz. The Russian historian, Vladimir Guerye,[1] found in the library of Hanover among Leibnitz's rough records a draft of a note, written in 1697, which evidently was destined for the Russian Czar. Among many other advices the note contains a recommendation to investigate North-eastern Asia in order to determine the connections between Asia and America. At that time a Russian embassy was passing through Hanover possessions and, as Professor Guerye suggested, Leibnitz's note might have reached the Czar through Mr. Leford, the Swiss adventurer and councilor of Peter the Great. The original of this note was, however, not discovered in the Russian archives. But there exist other traces of connections or direct correspondence between Leibnitz and the Czar. In a letter to Bruss in 1711 Leibnitz says:

"No one except the Czar can solve to the universe this doubt, and this may be regarded as a more glorious and important task than that which has been done by the Egyptian rulers in their time, relating to the investigation of the sources of the Nile."

In September 1712, Leibnitz sent to Bruss a note on the desirability of linguistic investigations and magnetic observations in Russia. At the conclusion he again touches the idea cherished by him, of the connection between the two continents,[2] accompanying it with considerations of great interest.

In a letter of October 26, 1713, to the Czar, writing from Vienna, Leibnitz again reminded him of the same plan. In 1716, Leibnitz and Peter the Great together passed about a week at the watering place of Pirmont (Braunsweig) and there is no doubt that they frequently spoke on this subject. Leibnitz wrote to Burge the following lines:

"The Czar is inquiring about all mechanical arts; but his main interest is concentrated on everything connected with navigation, and therefore he is fond of astronomy and geography. I hope that through him we shall be able to learn whether Asia and America are joined."

On June 22 of the same year he laid before the Czar in Pirmont, through Shaphiroff,[3] a memorandum in which he demonstrated, by points, what the Czar could do with glory in advancing civilization and science, and to clear up the question on the connections of Asia and America. Leibnitz repeats the same idea in another memorandum to the Czar, who also was evidently then in Pirmont. Thus the thoughts on the connection of Asia and America importunately occupied the mind of Leibnitz during twenty years, and he was constantly urging the Czar to solve this problem. Unfortunately wars, inner troubles and other affairs of state prevented the Czar from fulfilling Leibnitz's recommendation earlier, and it was only at the end of his life that he resolved to organise an expedition to solve the problem in which Leibnitz was so much interested.

[1] See Vladimir Guerye, On the Relations of Leibnitz to Peter the Great, according to the unpublished records of Leibnitz in the library at Hanover S. Pet. 1871, pp. 14, 18 (a separate of the Journal of the Department of Education); Collection of Letters and Notes of Leibnitz concerning Russia and Peter the Great, St. Pet. 1873, p. 19; published by the Imperial Russian Academy of Sciences. See also Professor L. S. Berg, *The Discovery of Kamchatka and Kamchatka Expeditions of Bering*, Leningrad and Moscow. 1934, p. 61 (all in Russian).

[2] i. e., whether Asia is separated from America.

[3] Baron Shaphiroff was the vice-chancellor of Peter the Great.

CHAPTER II

JAPANESE SHIPWRECKS NEAR KAMCHATKA SHORE

177-175 Restrictive legislation of the Shoguns, concerning Japanese navigation, tended to keep Japanese boats in home waters, but storms of the rough Japanese Sea often brought them to Kamchatka.

About the end of the seventeenth century one Japanese junk, after losing its mast in a storm, for six months was carried about by the currents until it was thrown up on the western shore of the Kamchatka Peninsula, not far from the mouth of the Opala River. Of the twelve Japanese who were in the junk, three were taken prisoners by the Kamchadal and nine succeeded in escaping in their junk in an unknown direction. Two of the three prisoners soon died from the Kamchadal diet, to which they could not become accustomed. The name of the Japanese who lived was Denbei. The Cossack chief Atlassoff, during his campaign in Kamchatka of 1697–1699, learned from the Kamchadal of their Japanese prisoner. He took him to Anadyr, and in 1701 he was brought to Moscow, and in January 1702 he was presented to Peter the Great. Denbei was the first Japanese who reached Russia and from him the Czar got his first information of Japan. At the order of the Czar, Denbei taught some Russians the Japanese language. The Czar promised to let him go home, but did not keep his word. Denbei was ordered to be baptised and received the name of Gabriel.

In 1710 another Japanese junk was wrecked on Kamchatka's shore to the north of Avacha Bay. There were ten Japanese, four of whom were killed by the Kamchadal and six taken prisoners. Some were taken from the Kamchadal by the Russian conquerors and kept in their fortresses where they were taught Russian. One of the prisoners, Sanime by name, was brought to St. Petersburg in 1714.

In July 1729 a third Japanese vessel was brought to Kamchatka, somewhere between Lopatka and Avacha, having on board 17 Japanese. It was a trading vessel which carried goods from Satsuma to Osaka. Soon after landing the Japanese were discovered by the Cossack chief, A. Stinnikov, and the Kamchadal accompanying him. At first the Japanese were well treated. When the Japanese saw that Stinnikov was plundering goods from their wrecked vessel, they tried to escape in a small boat, but Stinnikov ordered his Kamchadal to overtake and kill the Japanese. A part of them were killed by arrows, lances or sabers, obtained from the Japanese themselves. Some of them were drowned. Only two remained alive—a wounded boy, Gonza, and an adult Japanese, Soza, who were dragged from the water. When the news of the Japanese massacre reached the higher authorities an order was given to arrest Stinnikov, and he was hanged for his crime. Gonza and Soza were sent to European Russia. In 1734 they reached

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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St. Petersburg and were presented to the Empress Anna Ioanovna. In the same year they were baptized; Gonza was named Damian Pomortzev, and Soza, Kosma Shultz. They were charged to teach Japanese to the students of the Academy of Sciences. Neither lived long—Soza died in 1736 at the age of 43 and Gonza in 1739, being only 21.

Some years later (1745) other Japanese wrecked at Kamchatka's shore were brought to St. Petersburg for the same purpose, but the Japanese were simple fishers and hardly could be used as teachers.[1] Such wreckages of Japanese ships repeatedly took place about that time. The explorer Lesseps mentions nine Japanese whose ships were wrecked at the Aleutian Islands in 1788 and whom he brought to Kamchatka.[2]

THE UPRISING OF THE KAMCHADAL

THE CAUSES OF REVOLTS

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The causes of revolts of the Kamchadal were the cruelty, violence, greediness with reference to fur-skins, and the licentiousness of the Cossack chiefs and soldiers on the peninsula. On the other hand frequent mutinies of Cossacks against their chiefs and the incessant feuds between the chiefs and their parties could not inspire respect from the oppressed natives. Numerous local revolts had taken place from the very beginning of the occupation of the country by the Cossacks. Rebels and victors were equally merciless in their encounters. A general uprising of the Kamchadal which had been fomenting for a long time broke out in 1731. The Kamchadal were ready to rise before that date but did not dare to do so.

In 1729 Kamchatka was visited by the first scientific expedition of Bering and his companions who had armed crews. The ship *Gabriel*, with a crew of one hundred men belonging to the military expedition of the Cossack chief, Afanassy Shestakoff, remained in Nishne-Kamchatsk until July 1731. According to the original plan of Shestakoff's military expedition, the *Gabriel*, after leaving Okhotsk, was to visit Kamchatka and to proceed from there to the mouth of the Alutor River, where the commander of the expedition, Shestakoff, expected to arrive by land from the shore of the Okhotsk Sea, in order to subdue the Alutor Koryak; from there it was intended that the ship should sail to the mouth of the Anadyr River, exploring the shores on the way, and continue up the river to the fortification at Anadyrsk, which Shestakoff intended to reach by land. But Shestakoff's party was defeated and he himself killed by the Koryak after he had crossed the Paren River. When the news of Shestakoff's death arrived, the *Gabriel* remained in Kamchatka, awaiting further orders. In June 1731 she was ordered to proceed to the Anadyr and to enter the service of Pavlutsky, Shestakoff's lieutenant.

As soon as the *Gabriel* had weighed anchor and gained the open sea, the Kamchadal attacked the fortress Nishne-Kamchatsk and took possession of it. Presently a detachment was despatched to take Verkhne-Kamchatsk and Bol-

[1] W. W. Barthold, *Die geographische und historische Erforschung des Orients mit besonderer Berücksichtigung der Russischen Arbeiten*, Leipzig, 1913, p. 130.

[2] M. de Lesseps, *Travels in Kamchatka*, English Translation from French, vol. 1, London, p. 206.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

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The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

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In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropavlovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts with secretly lifting doors.[1] The Russians were met with simulated pleasure. Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

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Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and also as storehouses.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

669 761 was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, senteneed to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

157 177 181 The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

651 R. 177.65 The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 357.

5: Jochelson A-5 (1910-11) 1928 Kamchatka

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particularly tragic, as the sable, for whose fur the Russian demand was greatest, was an animal which inhabited Kamchatka and not the territories to the north of it.

The question as to how tribute was to be levied was later put on a definite basis by the so-called First Tribute (Yassak) Commission of 1762–1766. The reform introduced by the commission was based on the following principles: (1) The tribute is to be paid by a representative for the clan or group; the further apportionment of the tribute among the individual hunters is left to the natives themselves. (2) The representative of the group is to deliver the tribute in person to the administrative center; collectors are abolished. (3) Subject to the tribute are native men from sixteen to sixty years of age, who are to be called "workers" or "tax souls." (4) Payment may be made in furs or in money, the amount being calculated in money for each person, and varying in the case of fur payments according to locality, the nature of the animals and the current valuation of the latter. These principles, with some additions and a general lowering of the amount of tribute to be paid, were accepted by the Second Tribute Commission of 1828–1835. The age of workers was limited to men from eighteen to fifty. The number of workers of every clan was fixed by the census. The last census for this purpose was taken in 1859.

The fur-tribute, however, continued to be levied and to serve as a way to abuses for officials until the February revolution of 1917, when the Provisional Government under Kerensky abolished altogether this form of taxation of the Siberian natives.[1]

[1] The author contributed to the decree by his articles in the press on the Yassak question.

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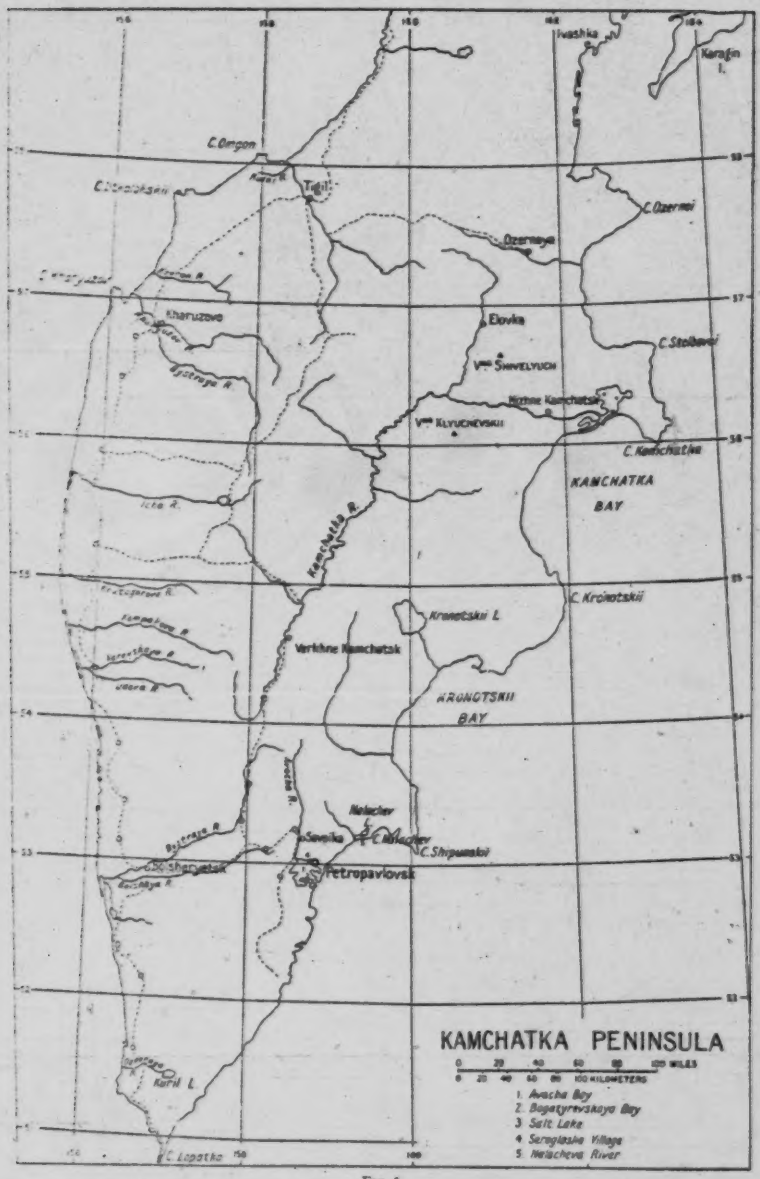

FIG. 1

5: Jochelson A-5 (1910-11) 1928 Kamchadal

CHAPTER III

THE COUNTRY AND SOMATOLOGY OF THE KAMCHADAL

GEOLOGICAL PAST OF KAMCHATKA

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Professor Obruchev[1] says that at the end of the Miocene Epoch the western shore of Kamchatka was sinking, and Professor Bogdanovich[2] supposes that during the Pliocene Epoch a considerable part of the present western and eastern shores of the peninsula were still covered with water. The beginning of the Quaternary, says Obruchev, evidently formed a continental phase which set in after the sinking phase of the Mio-Pliocene Epochs; the land in Siberia reached its maximum extension; the Bering Strait did not exist as yet, and the Chukchee Peninsula was connected with Alaska, and therefore the northeast of Siberia must have had a milder climate than at present. But all these are geological periods which preceded the appearance of man.

The Pleistocene Epoch, which is associated with the existence of man, may be proved in the valley of the Kamchatka River, according to Bogdanovich, by the frequent occurrence of remains of the mammoth and the *Bison priscus*. But nothing is said about the remains of man. In many places of Siberia man was contemporaneous with the mammoth, but there is a question whether the same was true in Kamchatka. About the end of the Pleistocene Epoch, says Bogdanovich, there was an extensive glaciation in many places of Kamchatka.

These climatic changes do not interfere with our theory of the migration to America of the Siberian-Americanoid tribes, including the Kamchadal, in one of the Interglacial Epochs, and of their remigration to northeastern Siberia after it was released from the ice.

But especially on the Kamchatka Peninsula must it be noted that our theoretical considerations are proved by archæological evidence.[3] No artifacts of the palæolithic man were discovered by the author on Kamchatka, and it is possible that no man lived during the old stone age on the Kamchatka Peninsula. It remains, however, for the future to prove or disprove it. In order to clear up my doubts in this respect I communicated with my friend the Russian geologist, Professor I. P. Tolmachoff, now curator of the Department of Invertebrate Palæontology of the Carnegie Museum, Pittsburgh, Pennsylvania. He is well known by his explorations in northeastern Siberia. He writes that it is hardly proper to conclude that man lived in the Kamchatka River valley in the Pleistocene Epoch on the only ground that remains of mammoth and *Bison priscus* were found there. Mammoth and man very often were neighbors but, as it seems, this dependence

[1] W. A. Obruchev, *Geologie von Sibirien*, Berlin, 1926.
[2] Karl Bogdanovich, *Geologische Skizze von Kamtschatka*, Petermann's Mitteilungen, Band 50, 1904, pp. 66, 198, 217.
[3] Waldemar Jochelson, *Archæological Investigations in the Aleutian Islands*, Pub. No. 367, Carnegie Inst. Wash., 1925.
Idem, The Ethnological Problems of Bering Sea, Natural History, Jour. Amer. Mus., Jan.–Feb., 1926, vol. xxvi, No. 1, pp. 90–95.

133 was not necessarily mutual. Man might follow the mammoth in order to hunt him, but the mammoth had no need of man. Thus the remains of mammoth do 172 not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the 631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky, 177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven 197 villages (between Amanino and Sopochnoye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They did not adopt from their Koryak neighbors the reindeer, although they were 226

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saiteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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The Russian Government repeatedly tried to introduce agriculture and gardening into Kamchatka. For this purpose peasants from Southern Siberia and European Russia were transferred several times to Kamchatka, but all experiments have failed and the imported husbandmen turned to fishing and hunting. Only in the valley of the Kamchatka River, near the village Kluchevskoye, small sowings of barley are still being made, but without any economic importance.

Experiments with gardening appeared to be more successful. Potatoes grow all over Southern Kamchatka where the digging of edible roots had almost ceased. Turnips grow there and the inhabitants of Kluchevskoye also grow cabbage, which heads well.

CLIMATE OF KAMCHATKA

132

The following data on the climate of the Kamchatka Peninsula are based on observations made in 1908–1909 by the members of the Meteorological Division of the Riaboushinsky Expedition headed by Dr. V. A. Vlasov.[1]

As climate is one of the most effective nature-agents regulating human life, data concerning three chief regions of the country will be given: the western coast, the eastern coast and the central part, represented chiefly by the valley of the Kamchatka River. The western and the eastern shores represent maritime climates, while the climate of the central part may be characterized as a continental one.

The climate of the western coastline of Kamchatka is more severe than that of the eastern, due to the cold Okhotsk Sea. During the winter cold winds prevail, blowing from the Siberian continent, the region of the great Siberian anticyclone. A late spring and a cold summer characterize the climate of the western coast. On the eastern shore of Kamchatka, under the moderating influence of the Pacific Ocean, frosts in the winter are not so severe. Rain and snowfall are more abundant. However, the cold current arriving from the Bering Strait and the amount of ice which it brings delay the beginning of summer and reduce its temperature.

The climate of the central Kamchatka, confined by its western and eastern mountain ridges, i. e., the valley of the Kamchatka River, distinguishes itself by all the peculiarities of a continental climate, having a cold winter and a comparatively warm summer. In order to demonstrate what has been said of the three climatic regions, mean annual figures for three points are given: for Tighil on the western shore, Petropavlovsk on the eastern shore and Kluchevskoye in the valley of the Kamchatka River.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
Tighil	−20.0	−19.8	−13.6	−2.2	2.4	6.2	11.3	12.1	7.0	−1.0	−7.4	−17.2	−3.5
Petropavlovsk	−10.9	−11.2	− 7.0	−1.6	3.1	7.9	11.8	13.5	9.8	4.2	−1.8	− 6.6	1.0
Kluchevskoye	−16.4	−15.2	−11.3	−1.5	4.6	8.5	12.15	13.1	8.8	−1.4	−7.8	−18.0	−2.0

[1] See V. A. Vlasov, The Kamchatka Expedition of F. P. Riaboushinsky organized by the Imperial Russian Geographical Society, Meteorological Division, vol. 1, part 1, *On the Climate of Kamchatka*; part 2, on *The Temperature of the Waters*. Moscow, 1916 (in Russian). Centigrade thermometers were used.

132 From this table it is seen that the climate of Tighil is much colder than that of Petropavlovsk and that the climate of Kluchevskoye, by its yearly and some of its monthly mean temperatures, is colder than that of Petropavlovsk, but by its summer temperature (May, June and July) it is warmer than that of Petropavlovsk.

Temperature of the soil. Monthly means, 1909.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Amplitude
Petropavlovsk:													
(1)	−10°5	−10°6	− 7°3	−6°5	8°8	14°5	17°6	15°6	10°9	.....	−4°7	−10°5	28°2
(2)	0.6	0.4	0.3	0.1	4.9	0.3	.....	13.4	10.9	.....	1.9	0.9	13.3
(3)	1.9	1.6	1.4	0.9	3.1	6.5	.....	12.1	10.4	.....	3.6	2.4	11.2
(4)	3.8	3.4	3.0	2.6	1.6	2.7	.....	6.8	7.1	.....	5.3	4.4	5.[illegible]
Kluchevskoye:													
(1)	−15.1	−17.3	−12.2	−2.4	10.2	15.6	19.3	15.9	.....	.....	−8.3	−19.3	38.6
(2)	− 9.5	−10.3	− 7.8	−3.1	3.5	9.3	12.8	12.4	.....	.....	−3.0	−10.4	23.2
(3)	− 1.2	− 2.6	− 3.6	−2.2	−0.5	0.0	2.0	4.0	.....	.....	1.7	0.1	6.8
(4)	1.4	1.0	0.7	0.5	0.4	0.4	0.4	0.4	.....	.....	2.7	2.1	2.3
Tighil:													
(1)	−15.3	−20.3	−14.0	−2.8	6.8	13.0	15.7	12.3	8.4	1.7	−6.1	−15.6	36.[illegible]
(2)	−11.9	−14.7	−12.0	−3.9	1.6	6.9	10.6	10.7	8.1	2.7	0.8	0.4	25.4
(3)	− 3.1	− 6.3	− 6.9	−4.4	−0.3	0.0	1.1	4.0	5.1	3.0	0.9	0.3	12.0
(4)	0.4	0.0	− 0.3	−0.9	−0.6	−0.3	−0.2	−0.2	0.0	0.3	0.3	0.2	1.2

(1) means on the surface; (2) means 0.25 meter deep; (3) means 1.0 meter deep; (4) means 2.0 meter deep.

This table is compiled from the numerous data on this subject by Vlasov, in order to show what time of the year may be regarded as the most favorable for making excavations in Kamchatka. In Petropavlovsk from May to September inclusive; in Kluchevskoye from July to September; in Tighil in August and September, and even in these two months we meet the freezing point at the depth of two meters. My own experience in that region gave still less favorable results. While digging on June 11 on the bank of Kulki River, a tributary of Tighil River, not far from the village Tighil, I met frozen soil at the depth of one foot and down. According to Vlasov only at the depth of more than 1 meter (3.28 feet) is the soil in Tighil frozen in that month.

SOMATOLOGY

144 The present Kamchadal have become mixed with Russian settlers and many
177 have lost their former Koryak-like appearance, even in places where officially no Russians are recorded. The same may be said of the inhabitants of the southern villages, Yavino and Golyghino, who in former times might have been physically influenced by the Kurilians (i. e., the Northern Ainos). The Kurilians had intercourse with the Southern Kamchadal, and some Kurilians had settlements on the southern extremity of the Kamchatka Peninsula.

141 The measurements of Kamchadal taken by Mrs. Jochelson show that the Russian metisation influenced very little the physical character of the Kamchadal. 158 men and 170 women were measured. The following table gives some of the measurements and indices.

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,567 mm.	5.4	1,495 mm.	4.6
Length of head	188 mm.	6.8	183 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 63), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding,
177 agriculture, etc.) show a marked increase in population. But these groups do not include the Kamchadal. On the other hand the latest investigators of Kamchatka,
609 the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Vulcane, Bären und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–190. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 46–63 (in Russian).

1. [i.e., a decline in population due to Syphillis, etc. --Analyst]

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

114 In the beginning of the seventeenth century the Japanese Government pro-
177 hibited all navigation beyond its home waters, and before the Russians conquered
439 Kamchatka the Kamchadal were not acquainted with the use of metals. How-
172 ever, there is no doubt that some iron instruments and other Japanese goods had
325 reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

000 It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.

[2] According to Krashenninikoff (vol. II, p. 49, in Russian) the Kamchadal called a needle "shish" and the Japanese as procurers of needles "shishamas."

[Pp. 22 - 36 have not been included in the file -- Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchadal (facing P. 41)

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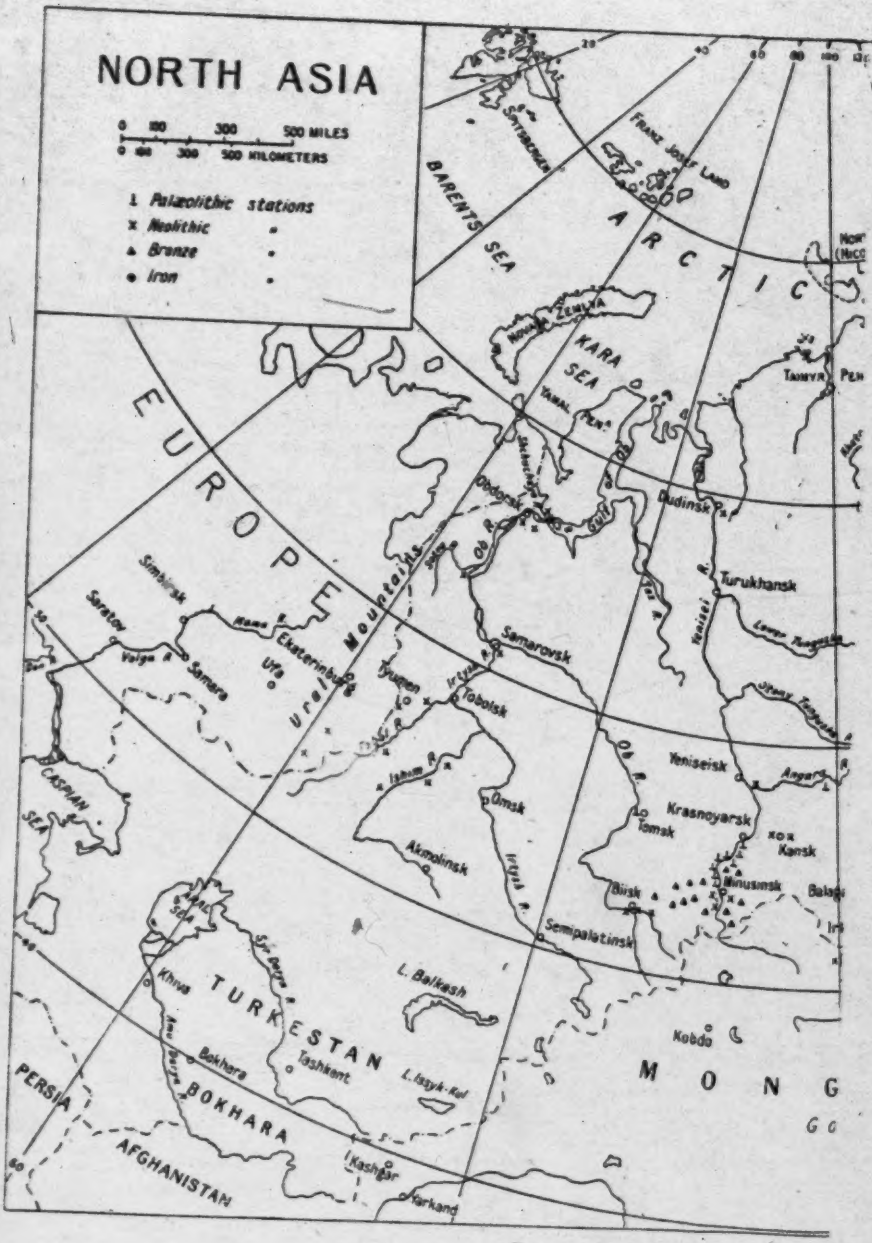
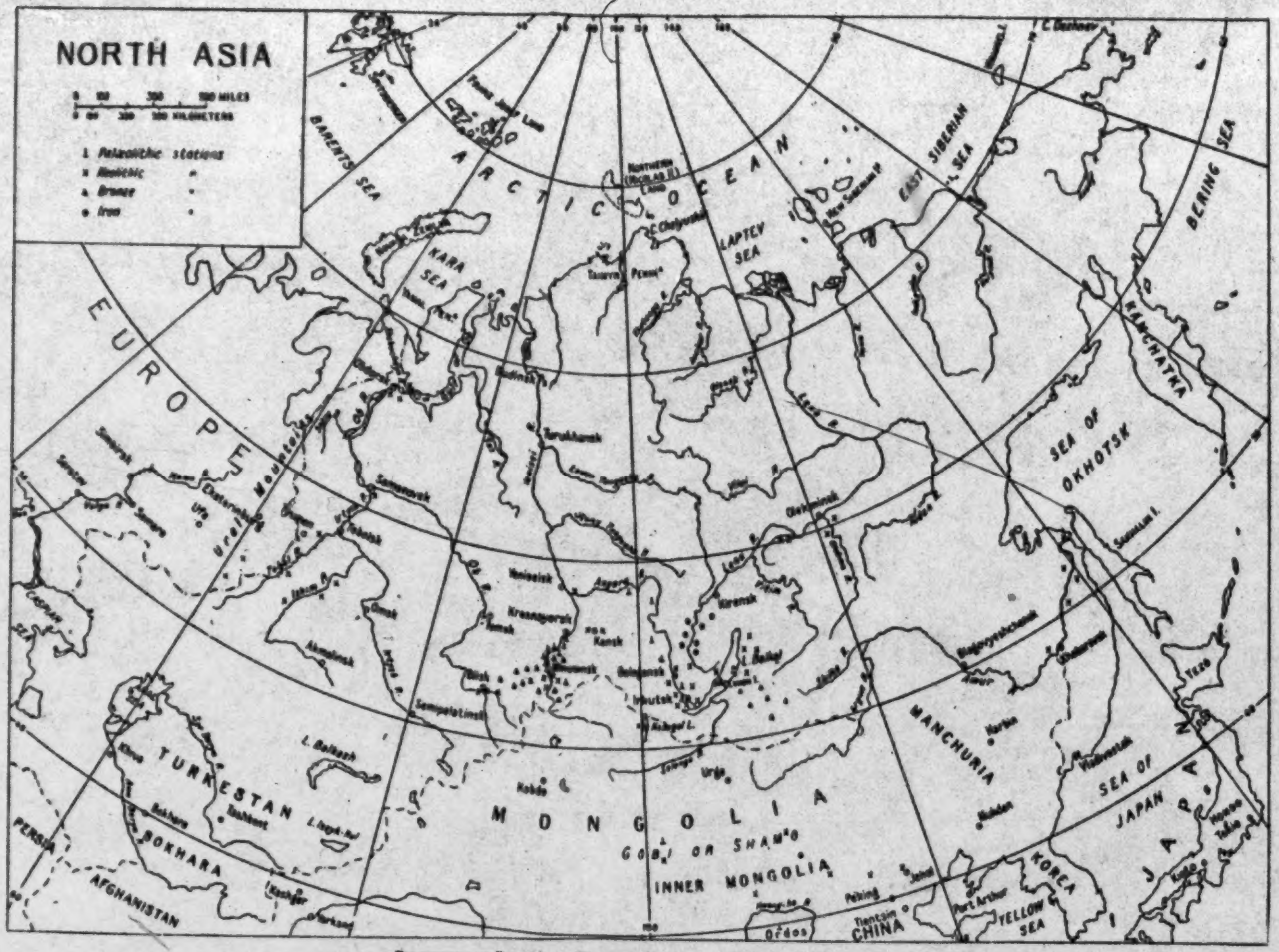


DISTRIBUTION OF PALÆOLITHIC, N[illegible]

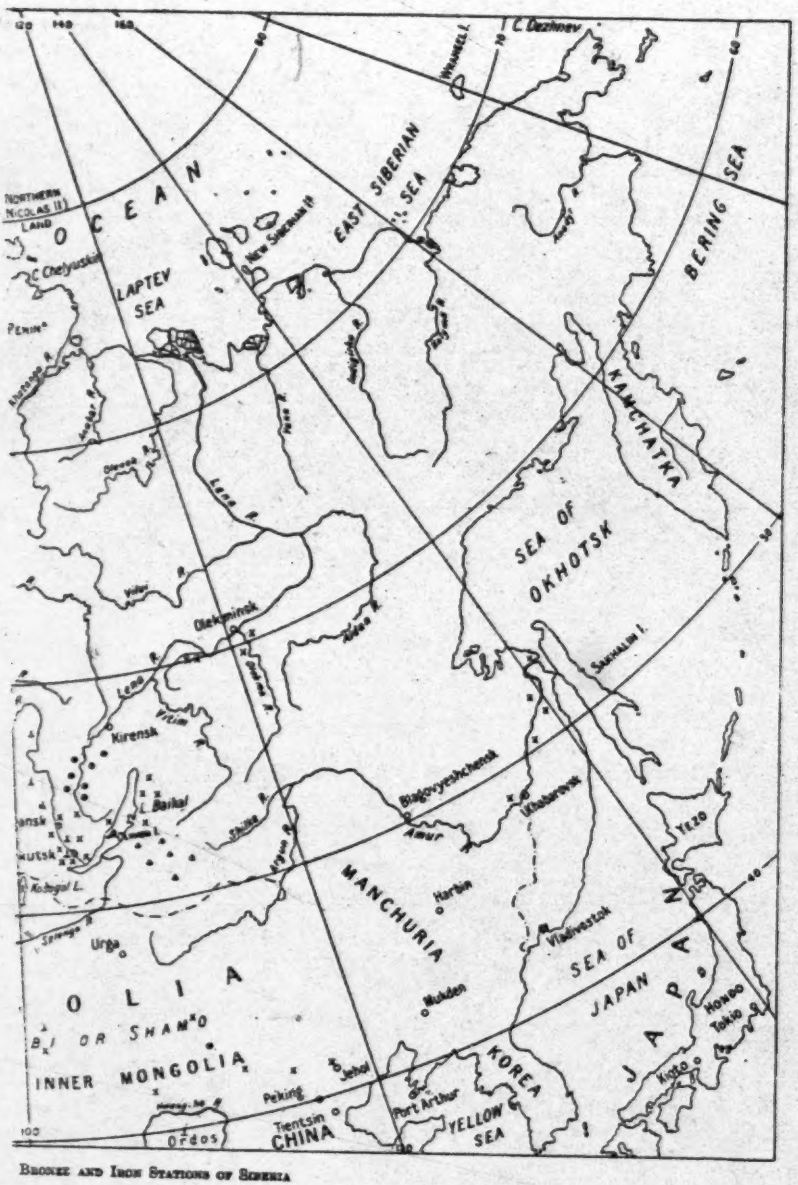
102

[Facing p. 41]


NORTH ASIA
1 Palæolithic stations
2 Neolithic "
3 Bronze "
4 Iron "
ARCTIC OCEAN
BARENTS SEA
KARA SEA
LAPTEV SEA
EAST SIBERIAN SEA
BERING SEA
KAMCHATKA
SEA OF OKHOTSK
EUROPE
Urals Mountains
TURKESTAN
BOKHARA
PERSIA
AFGHANISTAN
MONGOLIA
GOBI OR SHAMO
INNER MONGOLIA
MANCHURIA
KOREA
YELLOW SEA
SEA OF JAPAN
JAPAN
CHINA
Ordos
Tientsin
Peking
Port Arthur
Yakutsk
Irkutsk
Krasnoyarsk
Omsk
Tobolsk
Semipalatinsk
Kobdo
Urga
Khabarovsk
Vladivostok
Tsitsikar
Harbin
Mukden
Tokio
Osaka
Kyoto
Nagasaki
Hokkaido
Sakhalin
Kamchatka
Bering Island
Nizhnekolymsk
Yakutsk
Verkhoyansk
Ust'-Yansk
Novosibirskiye Ostrova
Taimyr Peninsula
Yenisei
Lena
Ob
Volga
Caspian
Aral
Tashkent
Bokhara
Samarkand
Kashgar
Khiva
Lake Balkash
Lake Issyk-Kul
Lake Baikal
Lake Tsaidam
Lake Kokonor
Lake Tengri-Nor
Lake Ala-Kul
Lake Ubsa-Nor
Lake Kosogol
Lake Hanka
Lake Biwa
Lake Suwa
Lake Kussharo
Lake Shikotsu
Lake Toya
Lake Chuzenji
Lake Kawaguchi
Lake Yamanaka
Lake Ashi
Lake Tazawa
Lake Inawashiro
Lake Kasumigaura
Lake Hamana
Lake Nojiri
Lake Ogawara
Lake Shinji
Lake Suwanose
Lake Tokyo
Lake Kyoto
Lake Osaka
Lake Nagasaki
Lake Hokkaido
Lake Sakhalin
Lake Kamchatka
Lake Bering Island
Lake Nizhnekolymsk
Lake Yakutsk
Lake Verkhoyansk
Lake Ust'-Yansk
Lake Novosibirskiye Ostrova
Lake Taimyr Peninsula
Lake Yenisei
Lake Lena
Lake Ob
Lake Volga
Lake Caspian
Lake Aral
Lake Tashkent
Lake Bokhara
Lake Samarkand
Lake Kashgar
Lake

(Facing P. 41)

102



BRONZE AND IRON STATIONS OF SIBERIA

CHAPTER VI

ARCHÆOLOGICAL REMAINS FROM THE KAMCHATKA EXCAVATIONS

SOURCE MATERIAL FOR STONE IMPLEMENTS

324 The following is a list of minerals of which the Kamchadal manufactured their stone implements and weapons. The minerals are given in the order of their diminishing hardness:

1 Flint
2 Hornstone schist
3 Quartz schist
4 Quartzite
5 Jasper (variety of quarts)
6 Chalcedony (agate)
7 Andesite
8 Obsidian, andesitic
9 Augite, andesitic
10 Porphyrite
11 Sandstone
12 Quartz slate
13 Marble
14 Slate
15 Red ocher
16 Volcanic tuff
17 White clay

171 While on the Aleutian Islands[1] no flint implements were found, a considerable number of arrow heads and other implements excavated by the author in Kamchatka were made of flint, according to the determination of a mineralogist, Professor A. G. Titov of the University of Moscow. The Aleut used andesite, instead of flint, most frequently for stone implements; the Kamchadal very seldom used this material, preferring the massive varieties of quarts and, partly, obsidian.
324

Soapstone, of which the Eskimo manufacture their lamps, is not met in Kamchatka and the Kamchadal use harder minerals for lamps, as will be seen later.

LOCALITIES WHERE EXCAVATIONS WERE MADE

172 The present writer made excavations in the following places:

(1) On the shore of Salt Lake on the isthmus in the Avacha Bay, August 19, 1910.
(2) In the Bogatyrevskaya Bay, above Salt Lake, in the forest, August 20, 1910.
(3) Cup-like holes were excavated not far from Salt Lake in afternoon of the same day.
(4) On the slope of the hill on the northeastern side of the Bogatyrevskaya Bay, August 21, 1910.
(5) In the village Syeroglaska, 10 miles from Petropavlovsk, August 25, 1910.
(6) In the village Savoiko, August 29–30, 1910. Savoiko is located on the left bank of the Avacha River, 16 miles from its mouth. Formerly it was called Stary Ostrog and renamed Savoiko after the Governor of Kamchatka (1850–1855), the senior captain and later admiral, V. S. Savoiko.

For numbers 1 to 6, see map of the Avacha Bay (p. 42).

(7) On the bank of the Nalacheva River, September 19.
(8) On the shores of the Nalacheva Lake, September 20 to 24, 1910.
(9) On the Nalacheva Cape, September 26–30, 1910.
(10) Ancient site on the mouth of Kulki River, emptying itself into the Tighil River, 4.6 miles from its mouth, June 10, 1911.
(11) Ancient site on the mouth of Kavran River, June 27 to July 6, 1911.
(12) On the bank of Osernaya River, 2 miles from Kuril Lake, August 6, 1911.
(13) On the Siwusk Cape in Lake Kuril from August 9 to August 14, 1911.

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 56.

[pp. 38-40 have not been included in the file -- Analyst]

172 Of the above localities, Numbers 1 to 12 yielded the following sites:

262

SITE 1

On a hill above Salt Lake there were several pits, which could not be noticed at first sight as they were covered with an abundant overgrowth of the shelamainik (*Filipendula kamtschatica* Max.) and horse-tails (*Equisetum heleocharis* Ehrh.) 6 feet high. The staple food of the old Kamchadal fishers consisted of different salmon species, the bones of which in decaying formed an excellent fertiliser for the soil. In my work on the Aleutian archæology I pointed out that no bones of salmon were found in excavations of ancient village sites on the Aleutian Islands, contrary to the statements of Dr. Dall for the Aleutian Islands and Professor Emile Rivière, cited by Professor MacCurdy, concerning finds in a cave near

2

Menton, France.[1] In his *Human Origin*, Professor MacCurdy[2] cites Mr. Abbo as having found on a skeleton excavated in Verneau, France, perforated salmon vertebræ, evidently worn as ornaments. It would be interesting to determine whether the vertebræ were really of salmon, and not of some other species of fish. As I have stated, the soft bones of *Salmonoidea*, which ascend rivers and fresh-water lakes for spawning, decay rapidly, falling to pieces in 2 or 3 years.

Professor R. Torii[3] referring to remains of food found in his archæological excavations in Manchuria tells of fish bones, the species of which could not be determined because they were only a heap of powder. These were undoubtedly salmon bones.

[1] Waldemar Jochelson, *Archæological Investigations in Aleutian Islands*, p. 138; W. H. Dall, *On Succession in the Shell Heaps of the Aleutian Islands*, Contributions to North American Ethnology, vol. 1, Washington, 1877, pp. 41-91; G. G. MacCurdy, *The Field of Palæolithic Art*, American Anthropologist, vol. 26, No. 1, Jan.-Mar., 1924, p. 41.

[2] George Grant MacCurdy, *Human Origins*, vol. 1, p. 362.

[3] R. Torii, *Populations Préhistoriques de la Mandchourie Méridionale*, Jour. College of Science, Tokyo Imperial University, 1913-1915, vol. XXXVI, Art. 6, p. 48.

172 As it was not an easy piece of work to cut away the heavy stalks of the coarse vegetation, we excavated only one pit, in which but few specimens were found. The hill was 9 feet high over the lake. The pit, after the vegetation was cleared, was 5 feet deep. Then followed a 3-foot layer of dark mold and a layer of yellow clay without any trace of cultural remains. No unperishable remains of building material were found. Specimens found in the mold layer were:

(1) A piece of rude pottery (2157).[1]
(2) A stone implement, not finished (2158).
(3) A stone hammer (2159).

SITE 2

There were 4 pits over the lake. The layer of mold was very thin and yielded only two specimens:

(1) A fragment of a stone lamp (2160), very primitive.
(2) An obsidian arrow point, not finished (2161).

SITE 3

Not far from the lake, right over the sea, about 3 feet high were many circular shallow pits on the flat gravel in which no cultural remains were found. My Kamchadal laborers could not explain the origin of these pits. They are probably traces of round tents of a military camp of the European allies who landed in Kamchatka during the Crimean war.

SITE 4

There were several pits with remains of burnt wood and stones in the dark soil, to the depth of 3 feet, but no other refuse. A yellow sand formed the base of the pit.

SITE 5

A pit was excavated to the depth of 4.5 feet. A layer of 3 feet contained cultural remains. There were found charcoal, burnt stones, bones of seals and shells of mollusks (*Katharina tunicata* Wood and *Modiola modiolus* L.) and the following specimens:

(1) A flint arrow point (2162).
(2) A polished marble object resembling a labret (2163), but it must be noted that no labrets were used as personal ornamentations by the ancient Kamchadal.
(3) A stone ax.

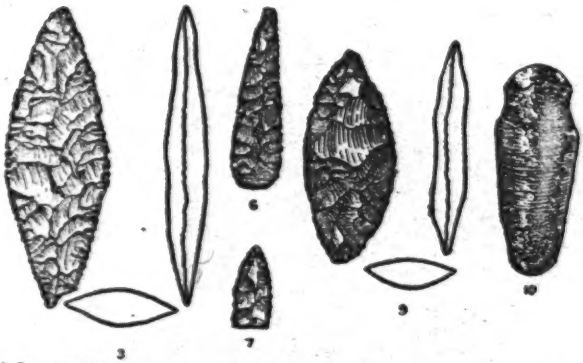
SITE 6

Two pits were excavated near the village Savoiko.

Pit A: The depth before digging was 3 feet 8 inches and a shaft was cut 5 feet 2 inches deep. The layers were as follows:

(1) Yellow sand covered with grass, 1 foot high.
(2) Volcanic ash, 5 inches deep.
(3) Fine gravel, 1 to 2 inches.
(4) Dark-brown sand with roots of plants, 2 feet 7 inches.
(5) Black soil with organic remains, 2 inches.
(6) Brown sand, 1 inch.

[1] The catalogue number is shown in parenthesis.



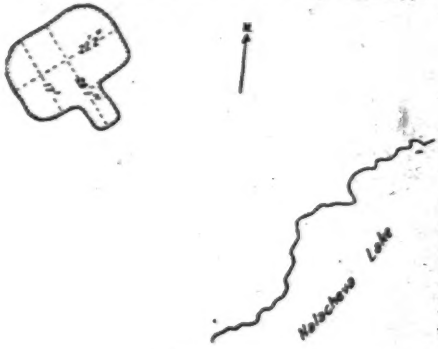
3. Laurel leaf-like blade of dark grayish flint.
6. Arrow blade of green jasper.
7. Arrow flint blade.
9. Blade of black obsidian.
10. Stone pestle of quartz slate.

All of Nalacheva Lake.

Pit B: Length, 24.7 feet; width, 22.2 feet. The entrance was directed to the east. We excavated 6 feet 7 inches deep until a single layer appeared. Separate layers were:

(1) Organic remains and roots of plants, 2 feet.
(2) Gray sand and volcanic ash, 2 feet 6 inches.
(3) Yellow sand, 2 feet 1 inch.

Pits A and B yielded the following finds: 1 stone ax (2165); 1 obsidian arrow or harpoon point (2166); a piece of pottery (2167); a laurel leaf-like blade of dark greyish flint with fine trimming on both sides. Length, 91 mm.; greatest width, 32 mm.; thickness, 11 mm. (see fig. 3, 2168); a stone arrow not finished; and two stone hammers (2170 and 2171).



4
Pit No. 1, Nalacheva Lake.

SITE 7

My party left Petropavlovsk on horseback on September 13 at 12.30 afternoon and reached the village Khalakhtyrka at 6 in the evening. The route lay through a low ridge and by the shore of the Khalakhtyrka Lake. The last 1.3 miles we moved along the Khalakhtyrka River, a most picturesque country. We passed the night in Khalakhtyrka village. A stone celt found while building a

5: Jochelson A-5 (1910-11) 1928 Kamchadal

172 blockhouse was given to me (2209). We left Khalakhtyrka in the morning of September 14. We, and our laborers, had to walk, as I could get only four pack horses for our freight, and the horses and drivers from Petropavlovsk had to return to that place. When it became dark we put up our tents and stopped for the night, only 1.3 miles from the Nalacheva River.

In the morning of September 15 we left our camp, and about 3 o'clock in the afternoon crossed the river in two small boats. Usually one boat is left on each bank for the use of travelers. You cross the river in the boat, taking a part of your freight with you, and coming back with two boats you carry over the remaining freight and passengers. There are also some planks leaning on trees, by which you can bridge the two boats in order to take over heavy freight or to cross more safely. The river is quite wide and has a strong current. The horses, freed from their pack or riding saddles, are driven into the river and forced to swim across. After crossing the river the travelers have to return both boats to their proper places.

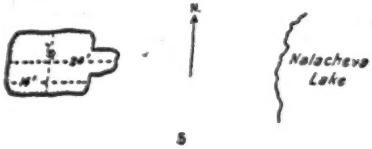
On September 16 we passed the sites on the Nalacheva River and between the river and Nalacheva Lake. September 17 to 19 we excavated two sites on the Nalacheva River, one 6 feet 2 inches deep, the other 4 feet 7 inches deep. In none of them were artifacts found, except burned stones in the center—traces of former hearths.

On the shores of the Nalacheva Lake excavations were made on September 20 to 24, 1910. Traces of pit-dwellings[1] were discovered all around the lake, showing that the place had been densely populated.

Pit No 1 was 3 feet 10 inches before digging (fig. 4). The hearth, 1 foot deep after digging, was opposite the entrance passage. In the corners of the northeastern side burned wood was found instead of posts. On the west, in a hole 2 feet deep, a rotten post, the lower end of which had been partly preserved, was still standing. The entrance passage was 10 inches deep before digging. The pit was covered with the grass of meadow-sweet (*Filipendula kamtschatica* Max.), spear-grass (*Calamagrostis langsdorfii* Trin.) and *Pleurospernum kamtschaticum* Hoffm. of the Umbelliferæ.

The distances between the inner posts were 6 feet and 7 feet 2 inches. The following artifacts were found:

(1) A fragment of an obsidian arrow point, not finished (2194).
(2) A stone arrow point (2194).
(3) A stone arrow point, not finished (2195).
(4) Five fragments of pottery.



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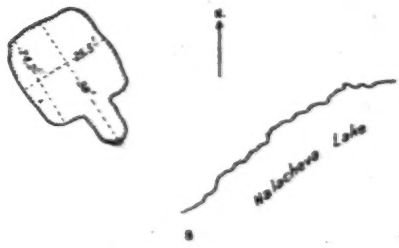
Pit No. 2 (fig. 5) was 16 by 15 feet. The length of the entrance passage was 8 feet. Before digging the depression was 4 feet, and the pit was excavated to a

[1] The sketches of the depressions, the outward evidences of ancient underground dwellings, are given in a somewhat irregular form, as they were drawn by the writer in the field. The irregular configuration of the cavities may be explained by the falling in of parts of the earthen walls.

172 depth of 1.5 feet only. Yellow sand without cultural remains followed. The following artifacts were discovered:

(1) Fig. 6 (2206). An arrow blade of dark green jasper, with a rounded base, well finished, the point being broken off. Length, 55 mm.; greatest width, 15 mm.; greatest thickness, 11 mm.
(2) Fig. 7 (2207). A fragment of a small obsidian point, similar to an Aleut surgical lancet.[1]
(3) A fragment of the lower part of an obsidian arrow point (2208).
(4) A stone celt (2210).
(5) A piece of pumice for polishing stone implements (2211).
(6) Fragments of two clay pots.
(7) In the entrance passage a piece of pottery with an inside ear was found.

In the morning of September 21, 1910, the temperature was 3° C.; in the afternoon snow was falling.



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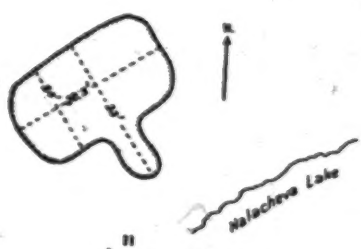
Pit No. 3, Nalacheva Lake.



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Pit No. 4, Nalacheva Lake.

Pit No. 3 was 2 feet 5 inches deep before digging, and was excavated to the depth of 4 feet. The following artifacts were discovered in this pit (fig. 8):

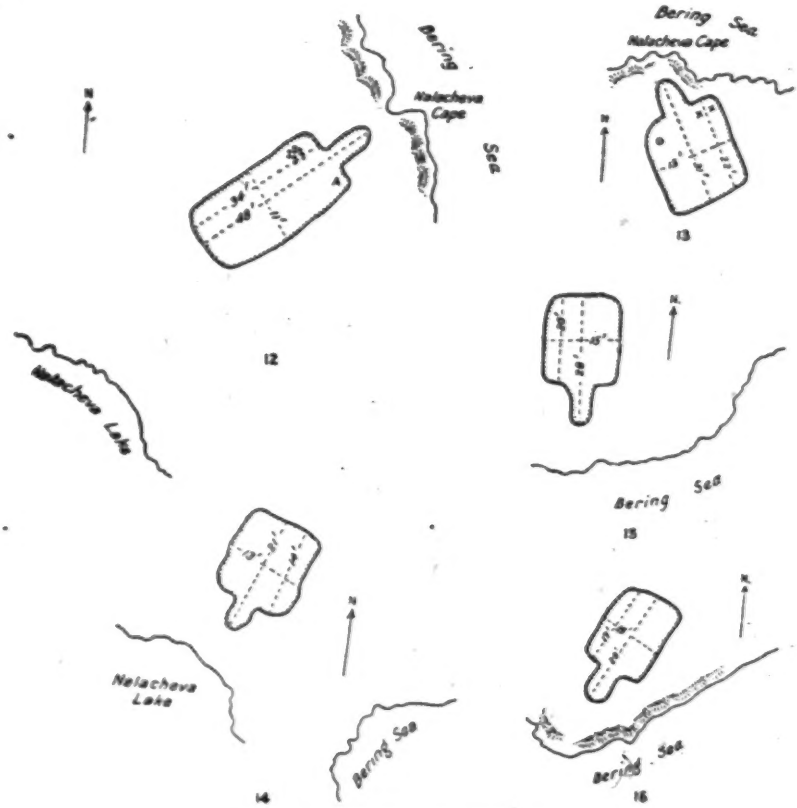
(1) An arrow point of rock crystal (2192).
(2) A fragment of a stone celt (2191).
(3) A stone celt (2205).
(4) A stone arrow point (2197).
(5) An obsidian arrow point in the form of a laurel-leaf, black with red veins. Length, 64 mm.; greatest width, 27.5 mm.; greatest thickness, 9 mm. Illustrated in fig. 9 (2198).
(6) A whetstone for grinding and polishing (2199).
(7) A stone chisel (2200).
(8) Fig. 10 (2201). A polished cylindrical pestle of grayish quartz slate for grinding paints or possibly food, made of edible plants mixed with animal fat or oil. Near both ends of the implement traces of pecking with a hammerstone may be seen, perhaps for making grooves. Length, 62 mm.; greatest diameter, about 23 mm.

Before digging, Pit No. 4 was 4 feet deep, and it was excavated to the depth of 7.5 feet (fig. 11). Artifacts discovered were:

(1) A stone celt (2202).
(2) A piece of rock crystal with traces of an arrow point (2203) having been manufactured from it.
(3) A small obsidian arrow point (2204).

At Site 9, on the Nalacheva Cape, diggings were made on September 26 to 30, 1910.

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 80, fig. 10.



Figs. 12 to 16, showing Pits 1 to 5 on Nalacheva Cape.

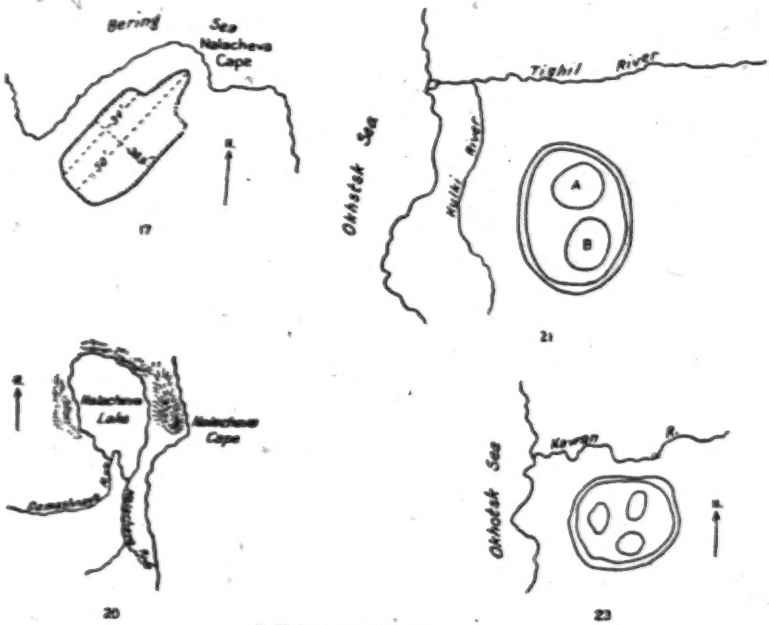
Pit No. 1 before digging was 2 feet 6 inches deep and was excavated to the depth of 3.5 feet. In the right corner from the entrance there were found hearth stones and on them were some shells of the mollusk *Mytilus edulis* L.; a broken clay pot was also found. The following artifacts were discovered in this pit:

(1) A flat obsidian arrow point (2178).
(2) A fragment of such a point (2179).
(3) A small obsidian arrow point (2180).
(4) A piece of obsidian in process of arrow making (2181).

Before digging, pit No. 2 was 2 feet 4 inches deep and the excavation was carried to the depth of 4 feet. X (fig. 13) shows the place where a complete clay pot with

172 handles inside was found; O, where fragments of another pot were found. The diameter of the rim of the complete pot was 1 foot 6.25 inches, of the bottom 11 inches, and the height of the pot was 8 inches. The pot was discovered at a depth of 3 feet 4 inches. The pit before digging was covered with *Empetrum nigrum* L., *Epilobium angustifolium* L., bushes of the wild rose (*Rosa acicularis* Lindle), the fern (*Cryptogramme acrostichoides* R. Br.) and other plants, and it took much time to clean the pit before digging. The following stone artifacts were found:

(1) Two rudely made arrow points of quartz (2172).
(2) Four obsidian arrow points.



17. Pit No. 6, Nalacheva Cape.
20. Sketch of Nalacheva Lake and Cape.
21. Sketch of ancient site of Kulki River.
23. Sketch of ancient site of Kavran River.

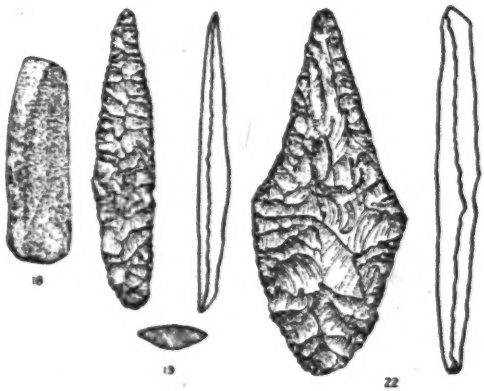
The depth of Pit No. 4 before digging was 2 feet 4 inches and it was excavated to the depth of 3.5 feet. Only two obsidian arrow points were found (2184, 2185).

Pit No. 5 before digging was 2 feet 2 inches deep and excavation was done to the depth of 3 feet 8 inches. Artifacts found were:

(1) A stone celt (2187).
(2) An obsidian arrow point, not finished (2188).
(3) A fragment of a thin obsidian arrow point.

172 The depth of Pit No. 5 before digging was 3.5 feet and it was excavated to a depth of 3.5 feet. The following artifacts were found:

(1) Five fragments of a clay pot, 2 with ears inside (2214).
(2) A broken stone ax.
(3) Three pieces of pumice for polishing stone implements (2216).
(4) Fig. 19 (2222) a-c. A flint blade for an arrow or throwing dart. Judging by the assymetrical curving it is not finished. Length, 90 mm.; greatest width, 19 mm.; greatest thickness, 7 mm.
(5) A fragment of a stone wedge (2225).
(6) A fragment of a stone implement (2224).
(7) Fragments of one clay pot (2239).
(8) Fragments of another clay pot (2240, 2241).



18. Chisel of quartz schist, Nalacheva Cape.
19. Flint blade, Nalacheva Cape.
22. Lance point of flint, Kulki River.

The depth of Pit No. 6 before digging was 3 feet 10 inches and it was excavated to the depth of 4 feet. Artifacts found were:

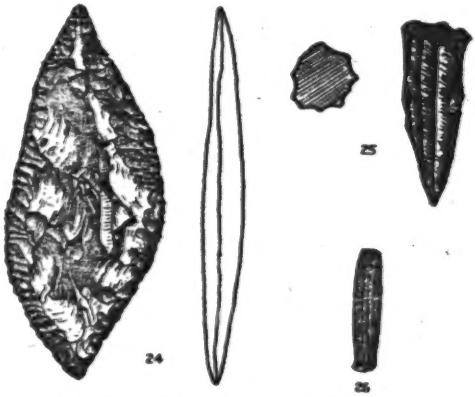
(1) A stone celt (2182).
(2) Fig. 18 (2183). A chisel of greenish gray quartz schist, polished. Length, 62 mm.; greatest width, 20 mm.; width of blade 18 mm.
(3) Three pieces of pumice for polishing stone implements.
(4) A big piece of pumice, with a hole for hanging (2226).
(5) A stone lamp (2228).
(6) Two stone sinkers (2229, 2235).
(7) A stone lamp (2239).
(8) A fragment of a stone ax (2231).
(9) A flat stone sinker (2232).
(10) A fragment of a stone wedge (2233).
(11) Eleven pieces of white clay (2234).

The sketch of map (fig. 20) was drawn by the son of the Governor of Kamchatka, Boris Perfilyev, a naturalist, who accompanied me on my trip to the Nalacheva region. No scale is given.

172 The following specimens, presented by Governor Perfilyev, were found by Mr. Eckermann, a representative of a fishing company, while digging a cellar in Palan.

(1) Ten pottery fragments with traces of impression of basket work (2217).
(2) A pottery fragment with a hole near the rim.
(3) A pottery fragment with an impression of weaving (2219).
(4) An arrow point of rock crystal (2220).
(5) A fragment of a stone implement.

The Kulki River empties into the River Tighil, 4.6 miles from its mouth. The site is located 1,738 feet from the mouth of Kulki on a hill over the right bank of the river. There were traces of an earthen wall which surrounded the site. The length of the hill was 76 feet; the width, 60 feet. Inside the wall were the remains of two pits, A and B, almost circular in form. The length of pit A



24. Knife-like implement of opaque black flint. Kulki.
25. Nucleus of tawny gray flint. Kavran.
26. Flint nucleus with 12 tiny facets. Kavran.

was 36 feet and its width 25 feet; the length of pit B was 25 feet and its width 21 feet. The digging was done on June 10, 1911, and the soil was still frozen from one foot down. The earth had to be thawed out by fire piles before the digging, thus hampering the work. Some specimens were broken while spading the dirt. The following specimens were found:

(1) Fourteen stone arrow points and other implements (2690–2703). The greatest length was 114 mm.; the smallest, 55 mm. One of the weapons (2692) is illustrated in figure 24 a-b. It is a knife-like implement of opaque black flint. As both asymetrical sides are trimmed, it looks rather to be a newly finished blade of a lance. The implement is very thin for its size. Length, 114 mm.; greatest width, 49 mm.; greatest thickness, 11 mm.

(2) Eighteen pottery fragments with ornaments (2704).

(3) Fifteen stone implements (2705–2719). One of these specimens is illustrated in figure 22 (2712) a-b. It is a lance point of black flint. The stem is thicker than the point. Carefully chipped, the edges are steeply trimmed. The stem was evidently intended to be inserted into a

172 wooden shaft. Length, 110 mm.; greatest width, 47 mm.; smallest width, 10 mm.; thickness of the narrow end, 9 mm.; of the broad end, 8 mm. Fig. 22, b, shows the side view.

(4) A long stone arrow point (2723).
(5) A stone ax (2724).
(6) Three stone arrow points, not finished (2725–2727).
(7) Stone pestles (see site Kavran, 2729–2733).

173 On the right bank of the Kavran River, in 6 minutes' walk from its mouth, a site surrounded by a wall of earth was dug out. Within the wall there were three almost circular pits as shown in figure 23. According to a tradition this was the fortified place of Kulki, a strong man of Koryak origin, who used to cross the central mountain ridge of the peninsula in order to fight the chiefs of the Kamchatka valley. The digging of the site was carried to the depth of 2,247 mm., 172 the frozen soil reaching to the depth of 2,095 mm. The shaft dug represented the following layers:

1027 *mm.*	a layer of turf (A).
1287	clay containing (B) organic remains.
1522	charcoal, implements, organic remains and clay (C).
1797	clay containing very little organic remains (D).
2167	yellow clay (E).
2247	shingle (F).

The excavation of the site was continued from June 22 to July 10 inclusive. As the soil was still frozen it had to be thawed by burning wood, layer after layer. This, however, did not prevent the breaking by the spade of some of the artifacts while digging. Almost all of the artifacts were found in layer C, and very few of them in layers B and D. The fact that artifacts were discovered only at a certain depth bears witness of the antiquity of the site. The following objects were found:

(1) 24 stone arrow points; the largest is 100 mm. long and the smallest 21 mm. (2665–2688). Of these the following are illustrated: figure 30 (2666), a–c, a laurel leaf-like blade of black flint with some defective trimming. Length, 99 mm.; greatest width, 32 mm.; greatest thickness, 12 mm. Figure 36 (2667), a–b, an obsidian blade of a laurel leaf-like shape, nicely trimmed. Length, 48 mm.; greatest width, 17 mm.; thickness, 10 mm. Figure 29 (2668), a–c, an arrow point of black flint, with small facets and symmetrical sides finely trimmed. Length, 60 mm.; greatest width, 16 mm.; greatest thickness, 8 mm. Figure 35 (2685), a small arrow blade of black flint. Length, 21 mm.; greatest width, 10 mm.; greatest thickness, 4 mm.

(2) Fragments of pottery (2689, 2720, 2721).

(3) A stone ax of quartz limestone (2728).

(4) A lance point of tawny gray flint, rudely chipped, evidently not finished. Length, 222 mm.; greatest width, 44 mm.; greatest thickness, 40 mm. See figure 33 (2723).

(5) Five stone pestles (2729–2733) of the sites Kulki and Kavran, used for grinding food of edible plants and roots mixed with meat, fat or animal oil. The largest found in Kavran was 228 mm. long and is illustrated in figure 28 (2733) a–b. Made of quartz slate.

(6) Three fragments of Japanese porcelain cups (2746).

(7) Two pieces of iron (2745).

(8) Shells of mollusks (2747).

(9) 35 fragments of bone arrow heads (2747a).

(10) The bone part of a root digger (2748), in Kamchadal qasqar.

(11) The same as No. 10 (2749).

(12) A bone arch which served as stanchions of an ancient Kamchadal dog sledge, in Kamchadal msan. Illustrated in figure 31 (2750), 4/15 of natural size.

(13) Two bone hooks (2751, 2752). The first hook is illustrated in figure 43, 1/3 natural size; the second in figure 50.

(14) Fragments of bone implements (2753–2756).

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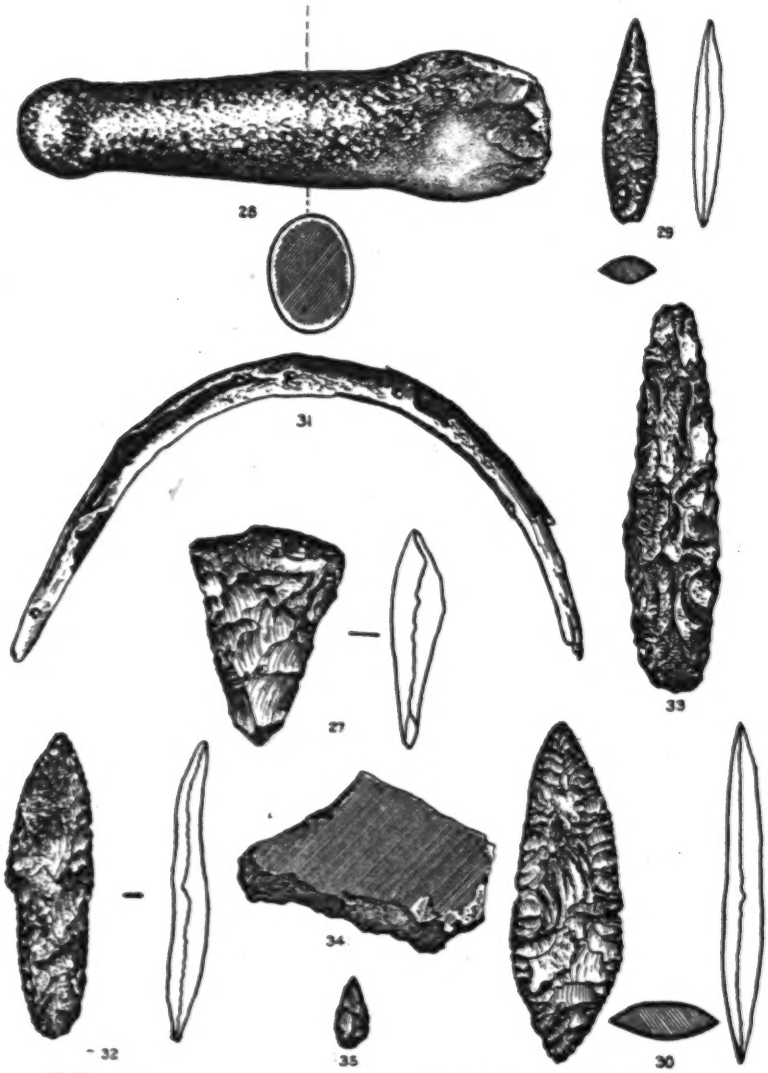

27. Flint scraper.
28. Stone pestle of quartz slate.
29. Arrow point of black flint.
30. Lanceolate leaf-like blade of black flint.
31. Bone arch of an ancient Kamchadal dog sledge.
32. a-b, implement of silicified black slate.
33. Lance point of tawny gray flint.
34. Whetstone of volcanic tuff.
35. Small arrow blade.

All of Kavran.

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(15) Two bone spades (2757, 2758).
(16) The bottom of a Japanese porcelain cup (2759).
(17) A piece of pumice (2766).
(18) A whetstone (2767), for polishing stone implements, of volcanic tuff. Illustrated in figure 34, 4/9 of natural size.
(19) 27 stone arrow points (2768–2794). Of these specimens the following are illustrated: figure 25 (2768), a nucleus of tawny gray flint from which flakes had been evidently obtained by striking with a hammerstone vertically from above; nine facets; the horizontal plane is assymetrical. Length, 49 mm.; horizontal plane, 21 by 18 mm. Figure 26 (2786), a flint nucleus of a little darker tint than the preceding one, of a cylindrical shape, with 12 tiny facets. Length, 35 mm.; the transverse plane section, 9 by 8 mm. Figure 27 (2775) a–b, a scraper of black flint, nearly triangular, slightly rounded and finely trimmed on the working edge, which has a hollow from one side. The other two sides of the triangle are irregularly trimmed and rudely chipped. The top end might serve as a graver. Greatest length, 62 mm.; greatest width, 45 mm.; greatest thickness, 13 mm. Figure 32 (2772) a–b, an implement of silicified black slate. Evidently a knife for working in wood. The straight stem might be kept as a handle or inserted in a wooden handle. The edge for cutting is somewhat curved. Length, 88 mm.; greatest width, 25 mm.; greatest width of the stem, 10 mm., thickness of the blade, 8 mm.
(20) 17 stone implements (2795–2811). Of these specimens the following are illustrated: Figure 37 (2795), a–b, scraper of black obsidian almost triangular in form, with a rounded working blade and shallow, enlongated, finger-like facets. From one side both edges are retouched, the other side has only one edge retouched. Greatest length, 47 mm.; greatest width, 31 mm.; thickness, 12 mm. Figure 38 (2801) a–b, a woman's tailoring knife, polished from both sides, similar to the Aleut-Eskimo women's knives of the same kind. There were evidently holes on the upper part for fastening to a wooden handle. Greatest length, 93 mm.; greatest width, 30 mm.; thickness, 2.5 mm.
(21) Nine stone implements (2812–2839).
(22) Six bone implements (2821–2826).
(23) Thirteen bone implements (2827–2839).
(24) Nine bone implements (2840–2848).
(25) Five bone implements (2849–2853).
(26) Nine fragments of bone implements (2854–2862).
(27) One bone implement and 12 pottery fragments (2863–2875).
(28) A stone sinker (2864).
(29) Figure 39 (2866), a drill head of quartzite, 2/5 natural size.
(30) A stone sinker (2865).
(31) A stone celt (2867).
(32) Figure 42, a bone spade (2868), 1/3 natural size.
(33) Six pottery fragments (2869).
(34) Four stone pestles (2870–2873).
(35) A bone knife for splitting the willow-herb (*Epilobium angustifolium* L.) (2874). Illustrated in figure 41.
(36) Two bone spoons (2875, 2876).
(37) Eleven stone implements: celts, arrow points and knives (2877–2887), the longer of which was an obsidian knife, length 150 mm.
(38) Figure 40 (2888), a stone for grinding paints, of quartz slate, 4/15 natural size.
(39) An obsidian celt (2890).
(40) A large stone pestle (2891).
(41) Two skulls (2917, 2918).
(42) Three stone lamps (2921–2923).
(43) A piece of a whale's lower jaw (2924).
(44) Two stone pestles (2926, 2927).
(45) A stone sinker (2928).
(46) A whetstone (2929).
(47) A stone sinker (2930).
(48) A large whetstone (2931).
(49) Figure 48 (2932), a stone hammer of volcanic tuff used in the manufacture of stone lamps and grooving stone sinkers, 1/3 natural size.
(50) A whetstone (2933).
(51) A fragment of a stone pestle (2934).
(52) Figure 49 (2935), a quartz pebble used in the game called matka, 2/3 natural size.
(53) Pottery fragments (2937).

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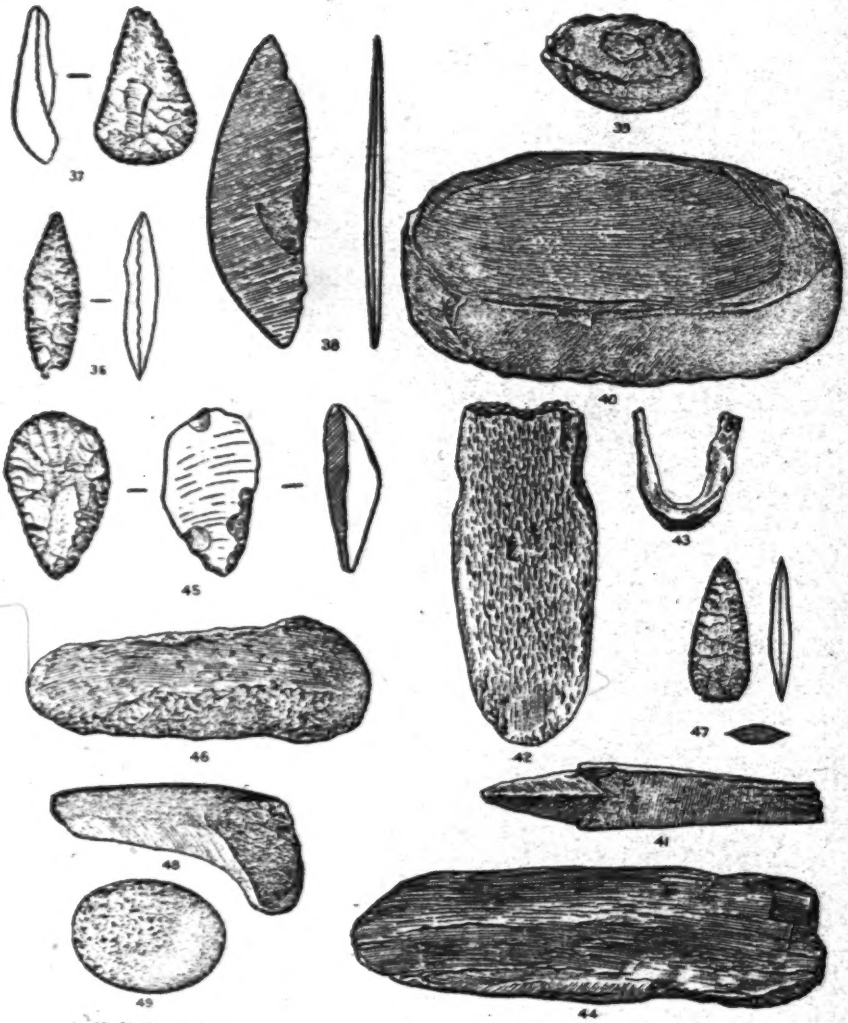

36. Obsidian blade.
37. Scraper of black obsidian.
38. Woman's tailoring knife of slate.
39. Drill head of quartzite.
40. Stone for grinding points of quartz.
41. Bone knife for splitting willow herb.
42. Bone spade.
43. Bone hook.
44. Bone shovel for digging.
45. Obsidian scraper.
46. Stone pestle for grinding food.
47. Obsidian blade.
48. Stone hammer of volcanic tuff.
49. Quartz pebble used in game.

All specimens found at Kayran.

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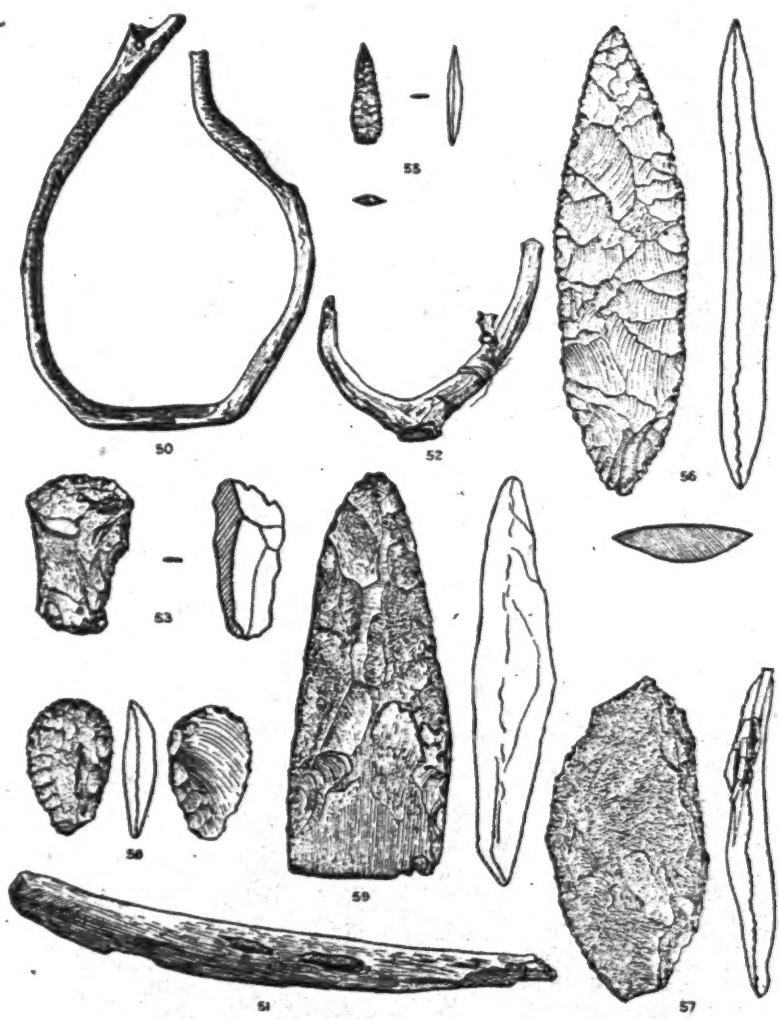

50. Bone hook for hanging fish for drying. Kavran.
51. Fragment of some bone implement, much decayed, possibly a part of a sledge runner. Kavran.
52. Bone hook of reindeer antler, probably used as a root digger. Kavran.
53. Scraper-like implement of quartzite. Kuril Lake.
55. Small arrow blade of brown reddish flint. Kuril Lake.
56. Lance blade or knife of greatly silicified slate. Kuril Lake.
57. Unfinished blade of greatly silicified slate. Kuril Lake.
58. Scraper of gray dark flint. Kuril Lake.
59. Adze of quartz schist, rudely chipped, with a polished blade from both sides. Kuril Lake.

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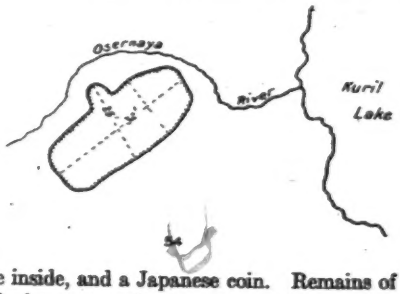
(54) Four ornamented pottery fragments (2940).
(55) Figure 51 (2941), fragment of some bone implement, much decayed, possibly a part of a sledge runner, 2/9 natural size.
(56) Figure 52 (2943), a bone hook of reindeer antler, probably used as a root digger, 1/3 natural size.
(57) Two handles of bone spoons (2944, 2945).
(58) Six fragments of bone implements (2946).
(59) Four fragments of bone implements (2947).
(60) Seven fragments of bone implements (2948).
(61) Four scrapers (2949).

We see from the number of specimens found (about 230), that the excavation of the Kavran site was particularly productive.

The ancient site on the bank of the Osernaya River is 2 miles from the point where it flows out to the sea from the Kuril Lake. There were several depressions of former dwellings, and we excavated the largest of these. The pit before digging was 2 feet deep. Then followed a layer of black earth more than a foot deep, after which the primeval soil consisting of gravel appeared. In the layer of black earth were found traces of a fireplace, two whetstones, two pottery fragments, one of



which had a handle inside, and a Japanese coin. Remains of posts were not discovered. The pit had a rectangular form like the pits on the shores of the Nalacheva Lake. Those of the Kulki and Kavran Rivers had rather a circular form.

Higher in the rocky bank over the described pit was a small depression resembling a pit. We excavated it and found a layer of mold about a foot deep in which were only a fragment of pottery, with an ear inside, and some bones of a bear.

We came to the ancient site on the shore of the Kuril Lake on August 8 and diggings were carried on from August 9 to 14. We left the lake August 16. In order to reach Lake Kuril we had to ascend the Osernaya River, flowing out from the lake into Okhotsk Sea. The river is fifty-five miles long.

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The mouth of the river is connected with some historical episodes. During the Russian-Japanese War, in May of 1905, a fleet of Japanese schooners landed there with the intention of taking possession of Kamchatka. The Japanese were volunteers, numbering 150, under the command of the retired Captain Hundzi Naridata. At that time there was no settlement at the mouth of Osernaya River. The Japanese put up a trenched camp, mounted their only cannon and hoisted a Japanese flag. Except the visit to Petropavlovsk by Admiral Togo's squadron,

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily
721 for the Japanese.

When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

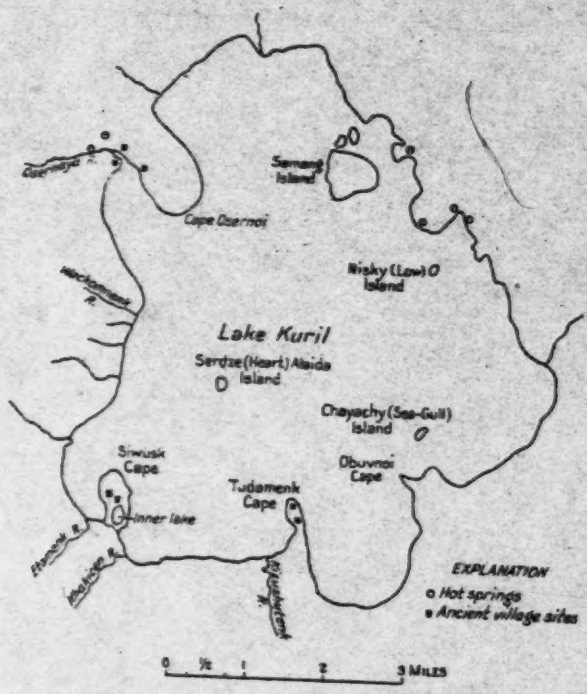
In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Jap-
anese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged
soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms,
partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing
company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
563 eight winter months, but the summer was very busy. Scores of laborers were
228 brought on the company's steamers from the Amur River. Not all the necessary
464 structures were ready at that time, and the imported laborers slept under the cover of primitive shades. Mountains of salt lay in the open, melting from rains. A part of the laborers were busy preparing a kind of caviar from the roe of



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228 salmon. After taking out the roe they threw overboard the split fish, causing an enormous waste of food-material. The laborers in the saltery and cannery threw out from their seines all other fish than salmon, and from the latter the hump-back salmon, which was not in favor with the foreman of the plant.

172 From information gathered before my trip to the lake I knew that there were several pits of ancient dwellings (see the map of the Kuril Lake). The natives
000 have either died out or were exterminated by the Russian conquerors. My party

000 consisted of myself, Mrs. Jochelson as assistant and physician to the party, and eleven laborers, of whom seven were Russians, three Kamchadals and one Japanese.

133 The Osernaya River, with its slanting bed, rocky banks, rapid falls and curves, forms a most difficult and dangerous route of travel. We had two boats and two canoes. One of the boats was for Mrs. Jochelson and myself; the other carried the tents, instruments, food and other supplies. The canoes served for reconnaissance and errands requiring despatch. It was very difficult to make progress on the turbulent river, particularly on the way up. Several times we had to disembark and carry our freight on our shoulders, while the boats were pulled by ropes through the rapids. (See Plate 5, figs. B, C.)

136 While there are no human habitations anywhere in the country, we were amazed to find well-beaten paths in the forests and on the mountains above the river, as if there were numerous human settlements. But realizing that these were roadways made by bears, we walked cautiously amid the dense vegetation with rifles ready for action. We did not see any bears while following these paths, but we heard the breaking and cracking of bushes and tree branches, and on the ground we found pieces of fresh salmon, the remnants of the bears' meals. The animals are very nervous and easily become alarmed. They have sufficient reason to be afraid of a man with a gun.

It is well known that at Lake Kuril and in its vicinity scores of bears are to be found. The abundance of fish and of many kinds of berries furnishes them ample food and favors their increase in number. The sparsity of human population is also favorable to the multiplication of the bears, although the few hunters of the coastal villages annually kill them by the hundreds.

133 After five days of painful effort we finally reached our destination. It was a windy day and our frail boats nearly capsized on the stormy lake, which is sur-
515 rounded by the peaks of extinct volcanoes and by steaming hot sulphurous springs,
757 the temperature of which reaches 100° C. (210° F.) and more. From our boat we observed steaming springs on the banks of the Osernaya when nearing the lake, but we had no time to stop to investigate them. We were told that the Kamchadal from Yavino and the Russians from Osernaya dig pits by the hot springs for bathing and curing different diseases. The temperature in these baths is reduced to 50° or 40° C.

136 From the head of the Osernaya River I directed my fleet to the Siwusk Cape (see map of Kuril Lake and Plate 5, fig. a). While excavating there we were entertained every day by the sight of bears fishing and gathering berries, particularly when we increased our field of observation by the use of opera glasses. The bears stood with their hind legs in the mountain rivers and creeks, and with their front paws managed to throw out on the banks the sea salmon, which in order to spawn ascend the rivulets that flow into the lake. The bears went after their prey and eating off the heads and spines, which are the most palatable parts of the fish, cast away the remainder. Their movements, turning, leaping and jumping, were so amusing that we could not restrain our laughter.

000 My laborers were anxious to hunt bears, but I could not allow them to go on such an undertaking as the time was short and a Government steamer was expected on a certain date at the mouth of the Osernaya River to take my party to Petropavlovsk. However, I once allowed two of them to go for a night hunt and they secured a little bear cub. They cooked and ate the meat.

On the morning of our contemplated departure from Lake Kuril, when all the specimens found in the excavations had been packed, the lids of the boxes nailed down and the boats loaded, I was tempted to linger just a little longer upon seeing two she-bears playing with their cubs on the other side of a pond in the rear of the promontory. I accordingly delayed my departure until the afternoon, and singling out two of the best marksmen from my party, and equipped with a stereoscopic camera and a motion-picture camera, I started in the direction of the bears. We had to undress in order to cross the Etamenk River in the rear of the promontory, and to carry on our heads the bundles of clothing, the rifles and the cameras, so that they might not get wet. We reached the other bank of the river, dressed ourselves, and tried to pass as noiselessly as possible through the little jungle which led up to the open meadow where the she-bears were playing with their cubs.

We stopped on the outskirts of the forest and put up the cinema and stereoscopic cameras. As the bears were still too far away, I told one of my two men to make a circuit about them and frighten them from the rear so that they might come nearer to us. Both cameras were in readiness to take pictures, when suddenly at a distance of about thirty yards appeared a young black bear quietly passing by. I quickly took a stereoscopic snapshot and was about to start with my cinema, but the bear became frightened by the clatter of the falling shutter of the photographic camera and, instead of running away, rushed in our direction. We had no choice but to aim at his head and fire as he neared the camera.

After ascertaining that the bear was dead, we looked around. None of the other bears were to be seen; they had been frightened by the shooting and had disappeared. As I could not remain on the lake any longer, I had to give up the idea of another attempt to approach bears with peaceful intent. The bear that was killed appeared to be not more than three or four years old. I took the skin and the meat of a hind leg for the laborers.

We returned to our camp late in the day and were compelled to spend one more night on the promontory. Next morning, our archæological mission fulfilled, we started our journey to the sea.

172 The proceedings and results of the excavations were as follows: I selected for digging the ancient village site on a cape or rather a small peninsula in the south-
133 western part of the lake. The Kamchadal call this cape Siwusk (see map of the
136 lake). The village was located on the rocky extremity of the cape and on its slope near the small inner lake. The extremity of the cape rises over the lake about 16 meters. The sides of the inner lake which join the cape with the mainland are about six feet wide. From both sides of the cape two small mountain rivers empty into the lake.

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rivers empty into the lake. They are rich in migrating salmon, which ascend the Osernaya River from the Okhotsk Sea to the lake for spawning in dense masses and attract numerous bears roaming the country. 172

Eighteen pits were dug—15 on the rocky hill and 3 below, where our tents are to be seen on Plate 5, figure 1. The general depth of the culture layers was about 3 feet. The pits under the hill were larger and seemed to be more ancient than those on the hill. No iron objects were found, but they yielded numerous pottery fragments, with handles inside, but no ornamentation. The pits were located mostly on the eastern slope of the hill, over a steep standing rock, and the outer margins of the pits seemed to have fallen down. The angles of the pits were somewhat smoothed; originally, however, the pits seemed to be quadrangular in shape, with the sides from 24 to 30 feet long. On the top of the cape was one pit of larger dimensions, probably that of a communal house for gatherings and festivals; this pit yielded a small quantity of objects; the greatest number of artifacts were furnished by the smaller pits. The following artifacts were found in the pits of the Kuril site:

(1) Nine arrow points (2959–2967) of quartzite and flint, the longest being 141 mm. (Plate 6, A).

(2) Twenty obsidian arrow points (2968–2987) (Plate 6, B). The greatest length was 80 mm. and the smallest 18 mm.

(3) Seventeen stone knives and other implements (2988–3004). The largest implement was 72 mm. in length (Plate 7, figs. 1–17).

(4) Twelve stone scrapers (3005–3016); the largest was 93 mm. in length (Plate 7, figs. 18–29).

(5) Twelve stone scrapers and other implements (3017–3028), the greatest length being 97 mm. (Plate 8, figs. 1–12).

(6) Eleven stone implements (3029–3039), some of them not finished. The greatest length was 100 mm. (Plate 8, figs. 13–23).

(7) Fragments of stone implements (3040).

(8) Forty-nine stone scrapers (3041–3089).

(9) Thirteen bone awls (3090–3102) Plate 12, figs. 1–13).

(10) Thirteen bone arrow heads (3103–3115) (Plate 12, figs. 14–26).

(11) Eight bone ornaments and other objects (3116–3123).

(12) Five bone implements (3124–3128) (Plate 13, figs. A).

(13) Fragments of bone implements (3129).

(14) Six fragments of bone implements (3130–3135) (Plate 13, fig. B).

(15) Four stone lamps (3136–3139) (Plate 14, figs. 4–7).

(16) Three stone lamps (3140–3142) (Plate 14, figs. 1–3).

(17) Three stone lamps (3143–3145) (Plate 14, figs. 4–6).

(18) Remnants of weaving (3151–3152).

(19) Pottery fragments of different pits (3153).

(20) A pottery fragment; the whole height of a pot (3154).

(21) A stone lamp; the first stage of manufacture (3157).

(22) Figure 66. A stone lamp of andesitic lava in process of manufacture (3158), 4/9 natural size.

(23) A pottery fragment from Pallan. A gift from the Governor of Kamchatka (3159).

(24) Three stone lamps (3165–3167) (Plate 15, figs. 1–3).

(25) Five stone lamps (3160–3164) (Plate 15, figs. 4–8).

(26) Seven stone axes (3168–3174). The largest is 197 mm. long (Plate 9, figs. 1–7).

(27) Twelve stone axes (3175–3186). The greatest length is 152 mm. (Plate 9, figs. 8–19). One of these specimens is illustrated in the text-figure 59 (3183). It is a rudely chipped adze of quartz schist, with a blade polished on both sides. Length, 122 mm.; greatest width, 25 mm.

(28) Four stone sinkers (3187–3190) (Plate 10, figs. 1–4).

(29) A stone sinker (3191) (Plate 10, fig. 7).

(30) Two stone sinkers with holes (3192, 3193) (Plate 10, figs. 5, 6).

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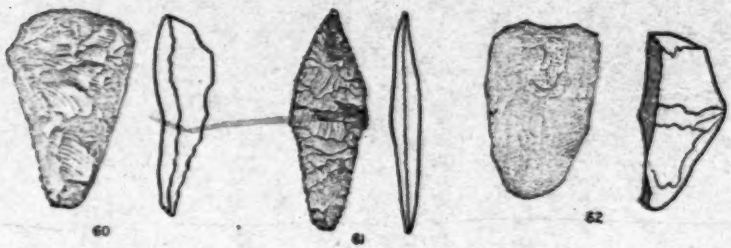
(31) A stone pestle (3194) (Plate 10, fig. 8).
(32) Six whetstones and one sinker (3210–3216) (Plate 11, figs. 1–7).
(33) Fifteen stone implements (3195–3209): axes, arrow points, awls and sinkers (Plate 11, figs. 8–22).
(34) Text-figure 60 (3217). A scraper of silicified slate; chipped from one side only; the curved working end is trimmed; the other side of the implement is flat with a few irregular chippings. Length, 60 mm.; greatest width, 38 mm.; thickness, 14 mm.
(35) Three pieces of pumice (3218).
(36) Four whetstones (3219).
(37) Thirteen broken stone lamps (3220–3232).
(38) Two stone axes (3233, 3234). One found near Petropavlovsk.
(39) A whetstone (3235).
(40) Paint (3236).
(41) A bone screw, double threads (3237).
(42) Ten iron and 1 copper implements (3238).
(43) Two stone hammers for chipping stone implements (3239).
(44) Different fragments (3240) of stone points.
(45) Fragments of wooden vessels (3241).
(46) A skull with the lower jaw (3242).



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Scraper of silicified slate. Arrow blade of white chalcedony. Scraper-like implement of silicified slate.
All specimens from Kuril Lake.

(47) Skeletal bones (3243).
(48) Two separate bones (3244).
(49) Two bone implements (3245).
(50) Pottery fragments (3246).
(51) Text-figure 61 (3247), a, b. An arrow blade of white chalcedony. General length, 67 mm.; length of the stem, 31 mm.; greatest width, 23 mm.; greatest thickness, 7 mm.
(52) Eighteen fragments of stone implements (3248–3265).
(53) Text-figure 62 (3269). A scraper-like implement of silicified slate, evidently remade from a polished adze, as shown by the polished upper part. Length, 52 mm.; greatest width, 32 mm.; height of the working edge, 18 mm.; greatest thickness, 23 mm.
(54) An obsidian arrow point (3280).
(55) Two stone scrapers (3298, 3299).
(56) Three Japanese coins of the eleventh century (3306–3308). See above, p. 37.
(57) Three fragments of ornamented bone implements (3309).
(58) A stone celt (3311).
(59) A scraper-like or some other not completed implement of quartzite. Greatest length, 45 mm.; greatest width, 48 mm.; thickness of the working end, 18 mm. Judging by the great thickness as compared with the length and width it probably may be a rejected piece, due to malformation. Text-figure 53.
(60) A small arrow blade of reddish-brown flint. Length, 31 mm.; greatest width, 10 mm.; thickness, 3 mm. (2967). Text-figure 55.
(61) A lance blade or a knife of greatly silicified slate. One side is more convex, as shown by the transverse section. Length, 141 mm.; greatest width, 41 mm.; greatest thickness, 12 mm. (2968). Text-figure 56.

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172 (62) Not finished blade, evidently intended to be subsequently elaborated into an implement of a specialized type. It might also serve as a scraper. Of greatly silicified slate. Length, 98 mm.; greatest width, 50 mm.; greatest thickness, 28 mm. (3029). Text-figure 57.

(63) A scraper of dark gray flint; one side is flat with some chippings from one edge; the other side is regularly convex with broad chippings. The working edge is rounded. Length, 41 mm.; greatest width, 26 mm.; thickness 9 mm. (3075). Text-figure 58.

(64) A stone lamp of sandstone with an ear for tying it to the sledge or canoe when traveling or hunting. 4/9 natural size (3140). Text-figure 64.

(65) A stone lamp for the dwelling, of porphyrite, 1/3 natural size (3141). Text-figure 65.

133 As stated above, we left the Kuril Lake on August 16—a quiet calm day. We crossed the lake, on the right being the rocky almost triangular Alaid Island, 823 where millions of birds were crying and rioting. The Japanese writer R. Torii refers to a Kurilian tradition, according to which in ancient times a high mountain rose where we have now the Kuril Lake. It was a handsome lady, and the neighboring summits, jealous of her, made her life unbearable by mockery and sneering, so she decided to leave Kamchatka and settled in the open sea. This became a small rocky island, Alaid (in Aino, Chachakotan), located to the northwest of the Paramushiri Island, and Kuril Lake formed in the cavity. Baron Dittmar refers to another variant of the Kamchadal tradition concerning the origin of the Kuril Lake. There was formerly a volcanic summit Alaid, which disliked its location and wandered over to the sea. In the cavity left by the mountain, the Kuril Lake originated. The mountain, however, left a piece of rock in the middle of the lake which the Kamchadal call Heart-Rock or Navel-Rock. Kuril Lake, according to Dittmar, is the second greatest lake of Kamchatka, Kronotzkoye Lake being larger.[2] Geologists explain the origin of the Kuril Lake by the sinking of an old crater. The lake now lies 200 meters above sea-level and its depth in some places reaches 300 meters.[3]

000 The trip back to the seashore took us less than a day. Our boats were speeding and leaping over the rocks of the stony bed of the Osernaya River so that we had to use poles as brakes in order not to be overturned, particularly on the dangerous curves. Hunters, who come in spring on dog sledges to the Kuril Lake to kill bears, make quite primitive boats of twig-frames covered with bear skins in order to transport skins to the mouth of the Osernaya River. These skin-boats easily glide over the rocky rapids.

As I feared, the Government steamer had left for Petropavlovsk a day before we reached the shore. It did not stop at Osernaya, passing from the western strait to Petropavlovsk through the Kuril Strait. The fall storms had begun in the Okhotsk Sea and it was dangerous for the steamer to approach the coast, which has no harbor. We might have had to remain in Osernaya for the winter if it had not been for the administrators of the saltery and cannery, who were waiting for a special steamer before closing the plants. They had already sent off on a freight steamer the imported laborers and salted and canned goods. On the next day the

[1] Torii, *Études Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science, Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921, p. 30.

[2] Carl von Dittmar, *Travels and Sojourn in Kamchatka in 1851–1855*, Part I, St. Petersburg, 1901, p. 684 (in Russian).

[3] See *The Kamchatka Expedition of F. P. Richoschinsky*, Zoological Division, Part I; P. J. Schmidt, Moscow, 1916. *The Investigations of the Zoological Division in Kamchatka in 1908–1909*, Chapter XII, written by Dr. A. N. Derzhavin, one of Professor Schmidt's assistants.

000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

177 From the remnants of objects of Japanese culture no inference can be made as
325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as
554 coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka
172 at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

According to Steller (p. 320), the Kamchadal paid homage to pieces of iron obtained from the Kurilians. The iron was set up on a pole in front of the dwelling as proof of the wealth and special importance of its owner. Krasheninnikoff also states (II, p. 97) that every Kamchadal possessing a fragment of iron was deemed rich and lucky.

177 The Kamchadal, now Russianized, no longer live in subterranean houses,
342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
823 We may only surmise the reasons for such a diversity. We know that many of

342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1] 1

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not as high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 186). The storehouse on posts is known everywhere in Siberia, as well as in North America.

1. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchadal

342 According to Krasheninnikoff the ancient Kamchadal had still another kind of summer dwelling, the superterrene grass lodge called bashabash. Unfortunately he does not state its shape—whether it was of a conical or hemispherical type. The bashabash was put up at the fishing places near the dwellings on piles and served chiefly as a place for cooking, which could not be done on the wooden platforms of the pile-dwellings.

261 757 171 White clay, pieces of which were found in some of the excavations, was eaten by the Kamchadal, according to Krasheninnikoff (II, p. 180), as a remedy for diarrhœa. Bogoras relates (*The Chukchee*, p. 200) that the reindeer Chukchee, the Koryak and Lamut in Kamchatka, occasionally use as food a kind of white clay called by them nute-ecen (earth-fat). The Kamchadal called the white clay "earth sour cream." Sternberg tells (*The Gilyak*, p. 17) of a Gilyak favorite dish for treating guests, called moss, which consists of a mixture of the gluey broth of fish skins, seal's fat, berries, rice, and sometimes of minced dried fish, to which the solution of white clay is added.

It must be noted that the use of some kinds of clay as food is not limited to Siberia alone. The eating of edible clay has been observed among certain Guiana Indians,[1] Carib and Antillean islanders,[2] and among the people of Georgia and the Carolinas.[3] Deniker refers to many other places where the habit of eating certain earthy substances—kaolin, clay, limestone—has been observed. He calls this habit *Geophagy* and explains it by the need of supplying the needed mineral substances (calcareous or alkaline salts).[4]

[1] W. E. Roth, *An Introductory Study of the Arts, Craft and Customs of the Guiana Indians*, Annual Report of the Bureau of American Ethnology, 1924).

[2] William Sheldon, *Brief Account of the Caribs who Inhabited the Antilles*, Transactions of the American Antiquarian Society, I, 1820, pp. 365–435).

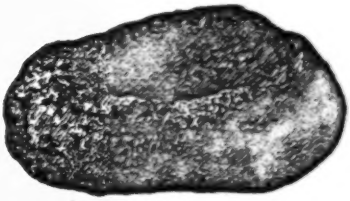
[3] Charlotte D. Gower, *The Northern and Southern Affiliations of Antillean Culture*, Memoirs of the American Anthropological Association, Number 35, 1927, p. 26.

[4] J. Deniker, *The Races of Man*, London, 1900, p. 145.

CHAPTER VII

STONE LAMPS

171 I discovered 36 stone lamps in excavations in Kamchatka. Some of them
354 were broken. All the types of ancient Kamchadal stone lamps are shown in Plates 14 and 15 and text-figures 64 to 66. They are not remarkable for great diversity as to size and form. I mentioned Aleut lamps[1] longer than 310 mm.,
172 and one lamp 1 meter long. There is in the U. S. National Museum at Washington an unusually large stone lamp (No. 90476) from Kodiak Island which weighs 67½ pounds.[2] An Eskimo stone lamp 43 inches long (i. e., somewhat



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64. Stone lamp of sandstone.
65. Stone lamp of porphyrite.
66. Stone lamp of andesitic lava, in process of manufacture.
All of Kuril Lake.

longer than a meter), weighing about 50 pounds is in the American Museum of Natural History of New York. Dr. Stefanson saw several larger lamps, but was unable to purchase them from their owners.[3]

354 The Kamchadal stone lamps show the following shapes: circular, elliptical,
172 egg-like and sad-iron in outline. No lamps of rectangular form, like those of the Aleut, and clam-shell shaped or crescentic in outline, like those of the Eskimo of Cumberland Gulf or Point Barrow, were excavated in Kamchatka.

354 Lamp No. 3158 shows the cavity rudely picked out with a hammerstone in
324 the process of manufacture. All the other illustrations of lamps show them in a finished shape and polished. The straight rims of some lamps were chiseled out
172 with hard quartz chisels (see No. 2183). Most of the lamps are flat-bottomed, so they stand without support. The lamp was put on a wooden stand in a somewhat

[1] W. Jochelson, *Archaeological Investigations in the Aleutian Islands*, p. 74.
[2] Walter Hough, *The Lamp of the Eskimo*, Annual Report, U. S. National Museum for the year 1897, Washington, 1898, pp. 1027–1057.
[3] See Vilhjamur Stefansson, *My Life with the Eskimo*, New York, 1913, p. 249.

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Tyrshov's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. XXXVII, No. 2, St. Petersburg, 1908, in Russian, figures 18 (p. 342) and 29 (p. 342).

CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

114 At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times. 252 Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones, 323 and there is nowhere in the writings of these authors a reference to clay vessels. 415 Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Palæ-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.

[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I–II, 1819, St. Petersburg (in Russian).

[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1867, p. 139.

[4] See R. Torii, *Études Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Khuchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851–1855*, p. 326, St. Petersburg, 1860, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thaleichys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1934, p. 12, in Russian).

REVIEW OF THE RELATION OF THE AINOS TO THE KAMCHADAL

000 As the Kamchadal pottery is closely connected with and probably adopted from the Ainos, it will be of interest to review the prehistoric and historic relations of the Ainos to the Kamchadal.

As admitted by many anthropologists, the Ainos are of a stock akin to the races of Europe, with some slight Mongolian characteristics adopted in Asia. The route by which the Ainos passed from the west to the east is not known, but probably they are a branch of the dolichocephalic Aryans Din-lin, mentioned in the Chinese annals, who afterward became mixed with Turkish and Mongolian tribes.

About 4,000 years B.C. the whole Japanese archipelago as far north as Yezo was occupied by Ainos. The population was, however, sparse. The Ainos were a genuine continental tribe. They had no boats and, as Torii suggests, crossed the Korean Strait on rafts, from the continent of Asia. There was probably more than one wave of Ainos from the continent. Then Mongoloid invaders came from the continent. The first wave of Tunguso-Mongolic conquerors appeared in Japan between 2000 and 1000 B.C. They forced out the southern Ainos to Yezo. The second wave of Tungus reached Yezo in the fifth or sixth century A.D. They were already partly mixed with Ainos, and these mixed-blooded invaders forced the Yezo Ainos farther to the north, and in their turn the Yezo Ainos forced their kin of the first wave to proceed to the Kurilian Islands. A part of them attained in their migration the southern part of the Sakhalin Island, settled there and continued to make pottery of the primitive type.

After a certain period of peace the Sakhalin Ainos were attacked by a second wave of Ainos coming from Yezo, but in view of the danger of being overpowered by the Orok-Tungus and Gilyak coming from the north, both waves of the Sakhalin Ainos made a common stand and became consolidated.

Those Ainos of Yezo, who did not leave for the Kurilian Islands or Sakhalin and who were not at the same time subdued and mixed with the Mongoloid invaders, took refuge in the mountainous and less favorable localities of the island.

Before the Tunguso-Mongols reached the middle of the Japanese Archipelago, the southern islands (Liu-Kiu and Kiu-Siu), inhabited by Ainos, were attacked by southern invaders of Indonesian origin. Advancing later to the north they met with the resistance of the Tungus and the mixed-blooded Aino-Tungus population, and finally entered as a third element in the ethnic compound of the Japanese nation. A certain infusion of Chinese blood may also be mentioned.

This somatological amalgamation of the Japanese people is shown in the results of the anthropological work by Professor Matsumura when observed by provinces. Although he measured a selected class of the Japanese population, students (males and females) of universities and normal schools, nevertheless we see that, in provinces where the Aino element may be supposed to lead, the dolichocephalic index and a lower stature predominate.[1]

[1] Akira Matsumura, *On the Cephalic Index and Stature of the Japanese and their Local Difference: A Contribution to the Physical Anthropology of Japan*, Anthropology Institute, Tokyo Imperial University, Tokyo, 1925.

000 We have said before that the Ainos were not acquainted with navigation, coming to the islands on rafts. Later they learned to build clumsy boats from the Japanese—not from the Indonesians, who are expert navigators; neither did they adopt the skin boat from the Chukchee and Koryak. As to shape, their dug-outs and boats do not resemble the canoes of the Kamchadal.

Figures 69–74 show objects found in 1889 by Dr. Turii in a neolithic site on the island Shumushir.
Fig. 69. Fragment of a bone comb ornamented with interwoven curves, reminding one of the decoration of the Kamchadal bone belt buckle of Plate 16, figure 3.
Fig. 70. Bone comb resembling the Kamchadal comb of Plate 16, figure 2. I am inclined to regard them both as implements for making decorative parallel lines when the clay is still wet. It may be that they served both objects: as hair combs and implements for decoration of pottery.
Fig. 71. Fragment of a bone comb with broken-off teeth.
Fig. 72. Half of bone belt buckle. The decorating interwoven curves are much larger than on the preceding buckles, both Kamchadal and Kurilian. Five drilled holes along the broken edge were intended, as it seems, to bind together the two broken halves.
Fig. 73. Bone buckle of smaller size, ornamented by irregular circles and straight lines.
Fig. 74. Bone case for fishing hooks.

177 While the Ainos had adopted nothing from the East-Siberian tribes as far
854 as concerns navigation, they made some cultural acquisitions from the Kamchadal or were influenced by them in some respects. The Kurilians weave grass baskets of the same kind and material and in the same manner as the Kamchadal do. The same is true of wooden utensils. On the other hand the Kamchadal adopted from the Kurilians the mode of manufacture of bone combs, belt buckles and ornamental motives. The Aino as well as the Kamchadal women use the head-band for carrying children on the back.[1]

1. [For additional culture traits shared by the Ainu and Kamchadal see category 171--Analyst]

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Some Kamchadal and Kurilian objects and their decorations are shown for the purpose of comparison. Plate 16 shows objects found by the author while digging on the shores of the Kuril Lake (see description of this plate).

According to Torii (*Les Ainou des Iles Kouriles*, p. 277) the wooden combs of the present Aino-women resemble very much the bone comb shown in figure 69. Chamberlain says (*Things Japanese*, p. 33) that ornamentations on pottery were made by the Ainos with a wooden comb, stamp or pointed stick. This is just the same as I concluded concerning the combs and other instruments illustrated on Plate 16.

To return to the proper subject of this chapter, the pottery. According to the investigations of Torii, the Kurilian women of the island Shikotan manufactured pots, jars, saucepans and plates from clay tempered with sand and chopped grass as late as the last century. About three generations ago they abandoned pottery making, using Japanese and Russian iron vessels of every kind.

Torii investigated numerous neolithic sites on the Shumushur and Paramushir Islands, and everywhere he found remains of pottery of the same primitive kind, which was in use the last time among the northern Kurilians. On the contrary, the Kurilians of the second wave left on the southern islands, Kunashiri and Iturup, remains of pottery of greater perfection. In the same period the Ainos of the second wave who remained in Yezo abandoned the manufacture of pottery, getting all kinds of wooden and iron vessels from Japan.

That part of the Ainos who were forced out from Yezo by the second wave of Japanese Ainos and went to the island Sakhalin, instead of the Kurilian Islands, continued to manufacture their primitive pottery. The second wave of Ainos who came to Sakhalin from Yezo brought with them metal vessels. The first wave being assimilated with them ceased to manufacture pottery, except vessels necessary for religious ceremonies. We know that practices connected with the cult persist everywhere long after they have been eliminated in ordinary life. The remains of this ceremonial pottery are identical with the remains of pottery of the Kurilian manufacture.

According to Mamiya Rindzo, the Sakhalin Ainos on the shore obtained iron kettles and pans from Japan and those from the interior got theirs from Tungus.[1]

POTTERY OF THE AINOS

The Ainos of Yezo and the Kurilians, according to Munro, were not supposed to be conversant with pottery until R. Torii in 1899 found that the Kurilian Ainos not only had used, but recently had made pottery of a coarse description.[2]

Dittmar found "small clay vessels" of most primitive workmanship. "The clay crumbled under the hands, it had evidently been badly (if at all) baked," says Dittmar. As the pots were saturated with blubber, he thinks it possible

[1] R. Torii, *Études Archéologiques et Ethnologiques: Les Ainos des Iles Kouriles*, Journal College of Science, Imperial University of Tokyo, 1919–1921, pp. 188–191.

[2] N. G. Munro, *Prehistoric Japan*, Yokohama, 1911, p. 195.

000 that they had been lamps, and not cooking pots; but this opinion may be offset by the shape, size and, especially, the depth of the pots found.[1]

323 Witsen, based on information received from cossacks, stated that the Kamchadal used clay vessels.[2] The Cossack Atlassov,[3] mentioned above, says in his 415 report to the Government that the Kamchadal made pottery in his time.[4] 2

We see that before our excavations there were some indications as to the former pottery-making of the Kamchadal, but these were somewhat vague. Our diggings furnished more definite data concerning the Kamchadal types and methods of manufacturing pottery. We discovered two kinds of coarse clay vessels—with handles inside and with holes near the upper rim of the pots—and a kind of more elaborate ceramics with outer ornamental designs.

POTS OR PANS WITH EARS INSIDE

323 Fragments of pottery with handles inside were found by the writer in many 172 diggings of the central and southern parts of Kamchatka, and he was fortunate to discover one complete pot in a pit on the shores of the Nalacheva Lake and another on the Nalacheva Cape (see Plate 17, figs. 1, 3). We may say that not only the wheel was unknown to the Kamchadal manufacturer of this rude kind of pottery, but neither the coil method nor the basket modeling process was applied by him, though there remained some impressions of basketry on the outer side. It seems that the vessels were worked out from single blocks of clay and beaten into shape. It is the crudest pottery. The dimensions of figure 1 have been given before (see p. 48). The thickness is about a third of an inch. It is difficult to say whether this kind of pottery was especially burnt before being used or was baked by the fire while cooking. The fact that these vessels remained intact after having been long buried under the ground proves that they were solidly made and water-tight. Being smeared with fat and blackened by smoke, they received a coating against water, which may be compared with the glaze of higher types of pottery. To make the clay more resistent it was tempered with sand, gravel and the hair of sables' tails.[5] The Cossack Atlassov, when presenting to the Government the tribute of the Kamchadal in sable-skins, delivered many of them without tails. In apologizing he said that the Kamchadal make boas of sables' tails and used the hair for tempering clay.

415 There is no doubt that the inside ears were intended for suspending the pot 172 over the fire, as they afforded better protection to the suspending cord or thong than those outside the pan.

[1] Carl von Dittmar, *Reisen und Aufenthalt in Kamchatka in den Jahren 1851–1853*, St. Petersburg, Part I, p. 233.
Dittmar gives the following measurements of a pot: upper diameter, 12 cm.; lower diameter, 10 cm.; maximum width, 14 cm.; depth, 10 cm. This vessel, therefore, had an aperture smaller in diameter than the middle part, and its bottom was still smaller than the aperture. Clay lamps are of a quite different shape, as shown by Bogoras, Nelson and other explorers of the northern regions.

[2] Nicolaas Witsen, *Noord en Oost Tartarye*, Amsterdam, vols. I-II, 2d ed., 1705, p. 673 (1st ed., 1692).

[3] See before p. 1.

[4] See G. Spanky, *Vladimir Atlassov the Conqueror of Kamchatka*, Jour. Imperial Russian Geographical Society, 1858, vol. XXIV, p. 104 (in Russian).

[5] Munro (*Prehistoric Japan*, p. 196) supposes that grass was mixed by the Kurilians in their primitive pottery, the clay of which became black, due to the carbonization of the grass. R. Torii (*Les Ainou des Iles Kouriles*, p. 186), referring to information received from old Kurilian people, says that the ancient Kurilian Ainos tempered clay for pottery with sand and minced grass called "nahkaski."

1. [The end of the 17th Century -- Analysis]

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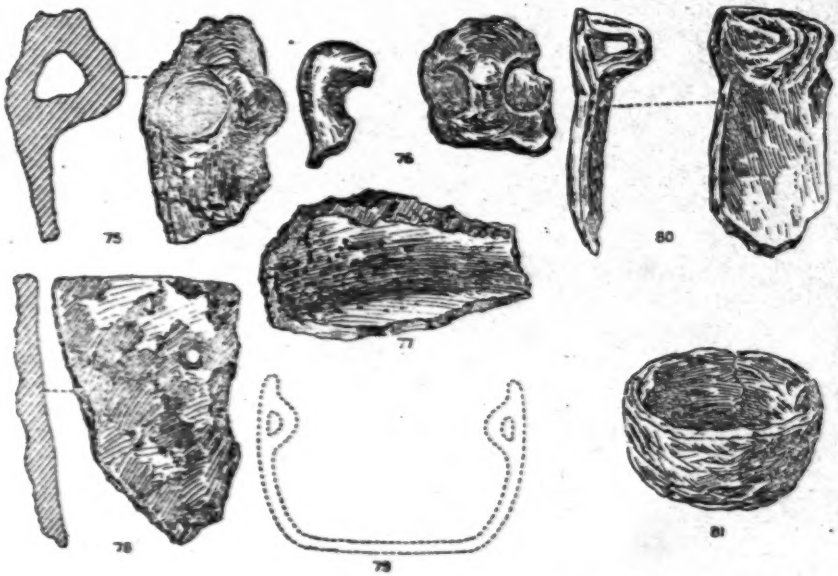
We have referred to Mr. Torii who found that the Kurilian Ainos used this kind of pottery. Mr. Mamiya Rinzo displayed a clay pan with handles inside from Yezo.[1] Mr. S. Suzuki has also shown a clay pan of rough make with the handles inside from Sakhalin Island.

The question arises as to where we may look for the place of origin of this kind of pottery: in Kamchatka or Japan. Pottery in general needs a sedentary life for its proper development. The same may be said of the primitive pottery



Fragments of ancient Kurilian pottery.

in question. It could develop among the original settlers of Japan, the Ainos, and spread to the north, to Sakhalin, Kurilian Islands and Kamchatka. The sedentary or semi-sedentary fishers of Kamchatka might have adopted it from the Kurilians.

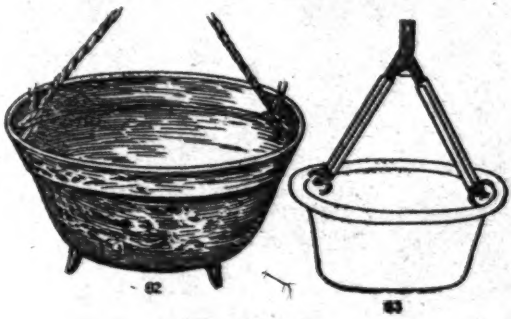
According to Mr. N. Tanaka, "within the last 20 years earthenware pans with handles inside were in use in Musashi and the island of Hachijo."[2]

Illustrations of the following fragments of ancient Kurilian pottery are taken from R. Torii's work (*Les Ainou des Iles Kouriles*, Plate XXXIII). Figures 75 and 76 show fragments of Kurilian pottery with inside ears. Figure 77 shows a

[1] The Japanese investigator Mamiya Rinzo spent the years 1804-1817 in Sakhalin.
[2] See Munro, *Prehistoric Japan*, Yokohama, 1911, p. 186. Cited from Tokyo Jinrui-gaku (Tokyo Anthropological Magazine), No. 18, 1887.

171 fragment of the lower part and the flat bottom of a clay vessel. Figure 78 represents a fragment of a clay vessel with a drilled hole for tying it by a cord to the hole
415 of another broken piece of the vessel. In figure 79, Torii gives an outline of a clay
172 pan with two ears inside. It is not clear whether there was a third ear, like that in the Kamchadal clay pots.

Figure 80 shows a fragment of ancient Aino pottery with an ear inside, found, according to Torii, in Sapporo on Yeso. It is shown one-third natural size. Figure 81 represents a clay vessel of ancient pottery with ears inside found in Esashi, Yeso; two-ninths natural size. This drawing is taken from an article by the late Professor S. Tsuboi in the Bulletin of the Tokyo Anthropological Society (vol. IV, No. 37, March 1889, p. 227). This vessel has only two inside ears. A rough sketch of a Sakhalin clay pot with ears inside is shown by Mr. Suzuki in his work, *Karafuto Nikki*.[1] Like figure 81 this vessel also has only two ears.



82 83

Iron cooking vessels.

According to Torii (*Les Ainou des Iles Kouriles*, p. 279) fragments of pottery with ears inside the pots were found also in Japan, i. e., on the Nippon Island. Thus we see that the manufacture of this kind of primitive pottery was not limited to the Kurilian Islands and Sakhalin only. It spread all over Japan—over localities formerly inhabited by Ainos. But from nowhere, except in Kamchatka, were clay vessels with three inside handles reported.

Figure 82 shows a sketch of an iron pan from Sakhalin with ears inside the vessel. The illustration was published by Torii (*Les Ainou des Iles Kouriles*, p. 195). Figure 83 shows a drawing of an iron pot with loops on the inside surface. It is from a photograph of a piece in the Museum of the Imperial University in Tokyo, kindly forwarded to me by Professor Akira Matsumura. The cord is covered with birch bark in order to protect it from the heat of the boiling pot. It must be noted that the iron pots (figs. 82–83) have only two inside ears like the

[1] Suzuki traveled in Karafuto (Sakhalin) Island in 1853. See *Karafuto Nikki*, Shigehisa Suzuki, With Notes and Addenda by Takeshiro Matsumura, 2 vols., Tokyo, 1890.

171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found
415 in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments
172 of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 Fragments of a different kind of clay pots were found by the author in the
323 excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these
171 fragments seems to be from small vessels, the clay to be burnt, and the pots more
172 decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot has a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 83 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Tsubai, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rims.

[4] See the author's work, *The Koryak*, p. 640, fig. 185.

171 common with that of the thick and clumsy clay lamps and unbaked quadrangular
415 kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in
323 the Koryak excavations were black from soot and fat, and were evidently well
baked, as they remained strong and hard, although they had been lying in the wet
172 soil. All these potsherds were made of coarse clay containing fine gravel and pieces of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen before (p. 30) that neolithic sites in the Baikal Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the author in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Ainos is shown in figure 77.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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Types of Kamchadal men, women and girls.

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A. Elders of the villages of the western shore of Kamchatka.
B. Group of blind men and women of the village Kharyusovo.

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JOCHELSON PLATE 1

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A. Two boats bridged in order to carry author's party across the Avacha River.
B. The same bridged boats carrying the author's cart to a small island and from there across the Avacha River to the village Savoiko. The horses are forced to swim across. The river is not deep and the laborers are punting the boats with long poles.
C. Three bridged boats carrying the author's party and laborers from the mouth of the Tigil River to its tributary, the Kulki River. The laborers are punting the raft along the bank.

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A. A Kamchadal storehouse on posts which serves also as a summer dwelling.
B. Greek-Catholic chapel in the village Kharyusovo.

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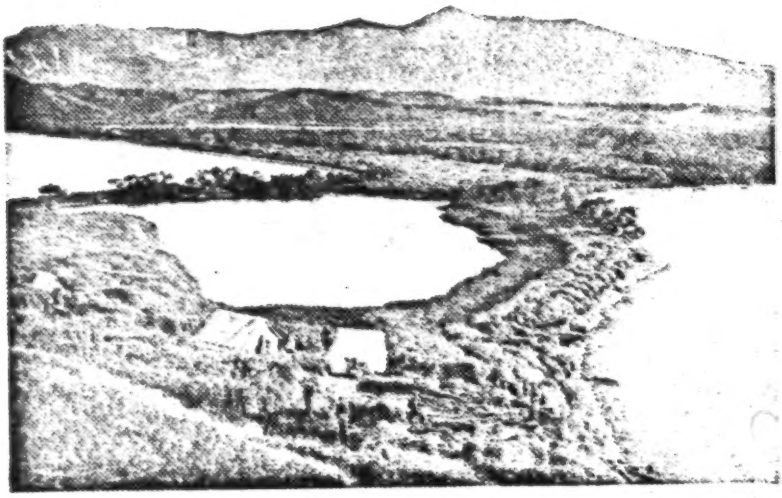

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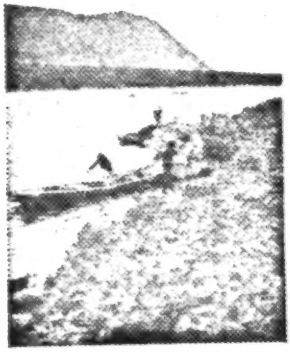
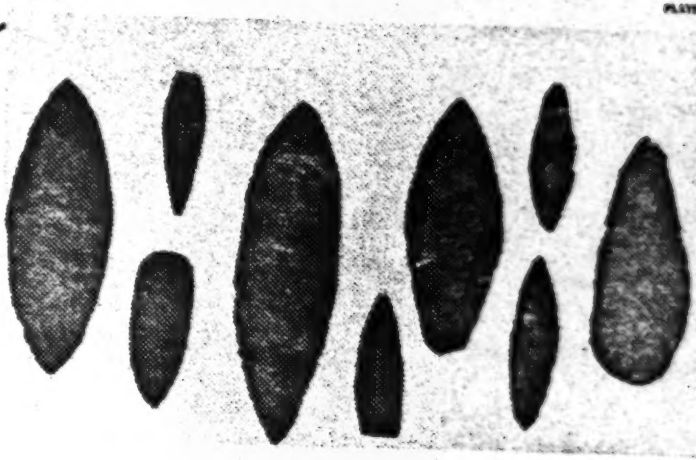


A. Inner pond on Cape Siwusk in Kuril Lake. In the foreground is the author's camp and the digging of two pits. (See p. 58.)
B. Unloading the boats, preparatory to ascending the rapids of the Osernaya River.
C. When rapids were encountered, the occupants of the boat disembarked and pulled at the ropes instead of the oars.

[p. 94]



A

B

A. (2959–2967). Lance and arrow heads of quartzite. About one-half natural size; the length of the largest head is 141 mm.

B. (2966–2987). Lance and arrow heads of obsidian. About three-fifths natural size; length of the largest head is 80 mm. and that of the smallest 15 mm.

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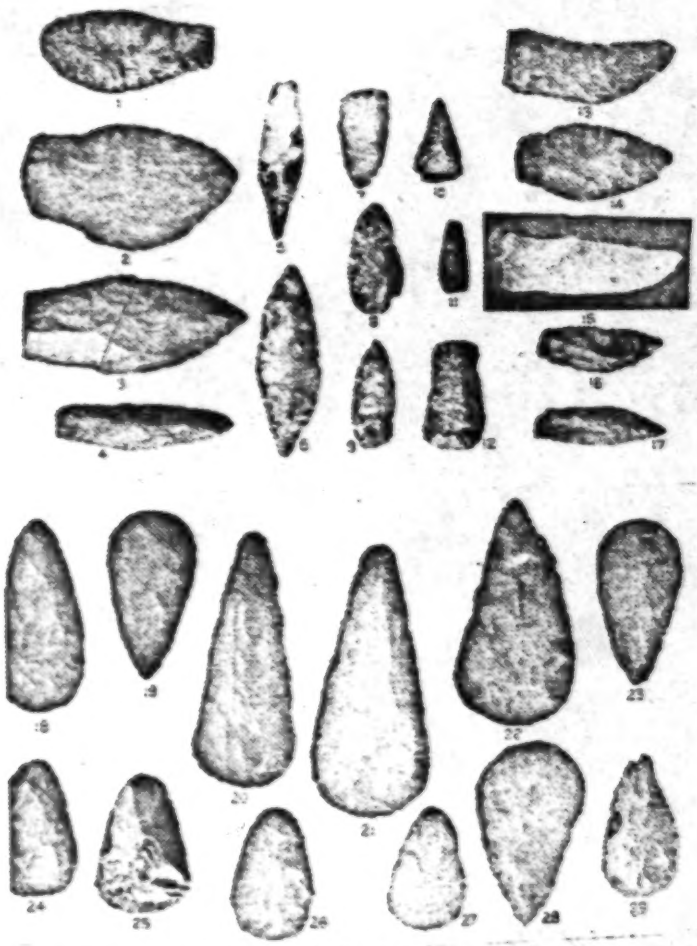
JOCHELSON PLATE 7



1 (2986). Man's knife of andesite, with wooden handle.
2 (2989). Man's knife of quartzite, with wooden handle.
3 (2990). Lance head of silicified slate.
4 (2991). Arrow head of quartzite.
5 (2992). Drill point of hornstone schist, with wooden or bone handle. Used for drilling wood, bone and also sinkers of volcanic tuff.
6 (2993). Arrow point of quartzite.
7 (2994). Arrow point with straight base, of silicified slate.
8 (2995) and 9 (2996). Arrow point with rounded base, of silicified slate.
10 (2997). Drill point of hornstone schist.
11 (2998). Small arrow point of quartzite, not finished.
12 (2999). Small adze of quartzite.
13 (3000). Curved carving knife of andesite, with handle.
14 (3001). Arrow point of quartzite.
15 (3002). Curved carving knife of light-green quartz schist.
16 (3003). Small carving knife of silicified slate.
17 (3004). Small arrow point of quartzite, unfinished.
18–24 (3005–3011) and 26–28 (3012–3013). Scrapers of quartzite.
25 (3012) and 29 (3016). Scrapers of andesitic obsidian.

All obtained in excavations on Kuril Lake. About three-fifths natural size; largest specimen 93 mm. long.

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JOCHELSON PLATE 8

1 (3017). Andesite knife for carving wood, with perforation for securing it to wooden or bone handle.
2 (3018). Andesite point of a lance.
3 (3019). Skin scraper of quartz schist.
4 (3020). Skin scraper of quartz schist.
5 (3021). Fragment of an andesite point.
6 (3022). Spear point of quartz slate, unfinished.
7 (3023). Andesite point of a lance.
8 (3024), 9 (3025), 10 (3026). Andesite point of an arrow.
11 (3027). Andesite blade of a lance.
12 (3028). Same as figure 8.
13 (3029), 14 (3030). Andesite blade of a lance.
15 (3031). Skin scraper of silicified slate.
16 (3032). Andesite blade of a lance.
17 (3033), 18 (3034). Andesite blade for an arrow.
19 (3035). Flint blade for a lance.
20 (3036). Arrow point of quartz schist.
21 (3037). Fragment of a quartz schist point.
22 (3038). Flint blade for a lance, unfinished.
23 (3039). Andesite blade for a lance.

All specimens from Karil Lake.

JOCHELSON [P. 97] PLATE 6

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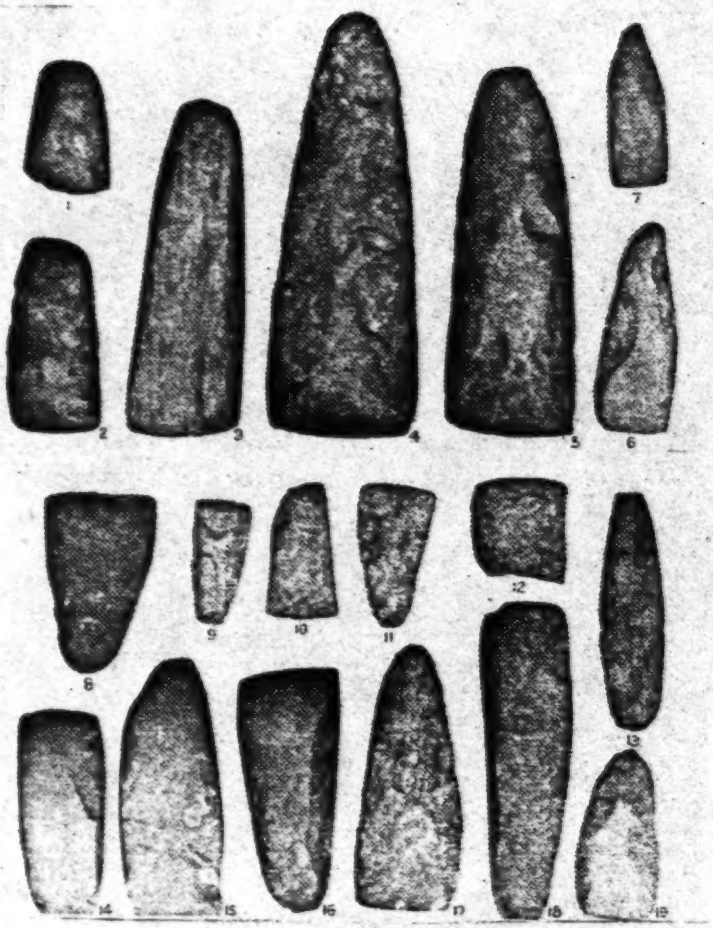

1 (3168). Adze of green quartz schist, polished. From Kuril Lake.
2 (3169). Adze of green quartz schist, blade polished. From Kuril Lake.
3 (3170). Ax of jasper, wholly polished. From Kuril Lake.
4 (3171). Ax of chalcedony (agate), partly polished. From Kuril Lake.
5 (3172). Ax of quartz schist, polished. From Kuril Lake.
6 (3173), 7 (3174). Adze of green quartz schist, polished. From Kuril Lake.
8 (3175). Adze of hornstone schist, not perfectly polished. From Kavran.
9 (3176). Adze of quartz schist. From Kavran.
10 (3177). Adze of jasper, polished. From Kavran.
11 (3178). Adze of quartz schist, polished. From Kavran.
12 (3179). Fragment of an adze of quartz schist. From Kavran.
13 (3180). Chisel of jasper, partly polished. From Kavran.
14 (3181). Adze of agate, polished. From Kavran.
15 (3182). Adze of jasper, polished. From Kavran.
16 (3183). Adze of agate, polished. From Kavran.
17 (3184). Adze of quartz schist, partly polished. From Kavran.
18 (3185). Chisel of jasper, polished. From Kavran.
19 (3186). Adze of green quartz schist. From Kavran.

The largest specimen of this plate, figure 4, is 197 mm. long.

[P. 9]

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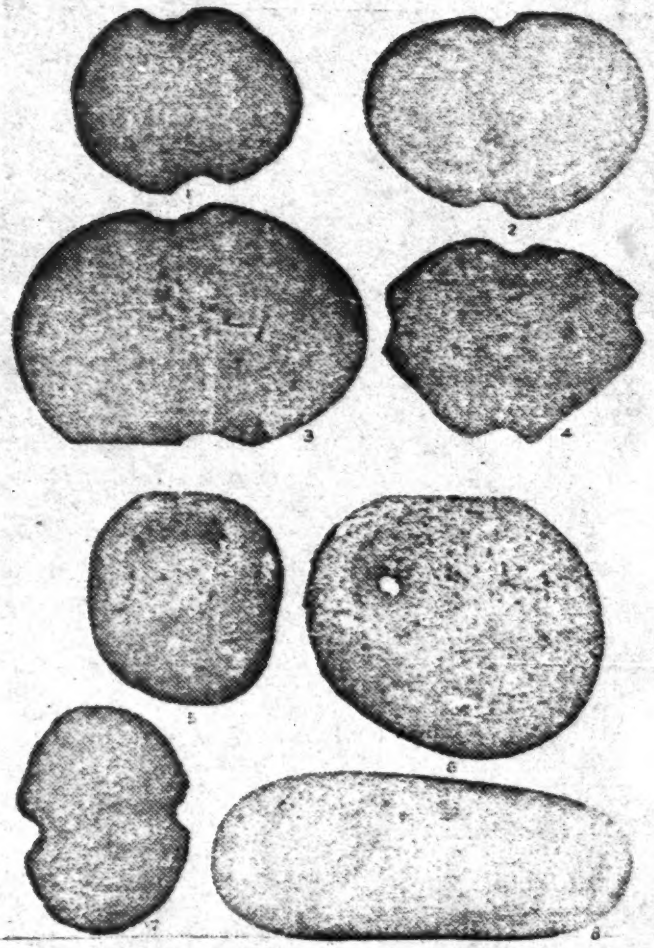

1 (3187). Fish-hook sinker of volcanic andesitic tuff from the mouth of Kavran River.
2 (3188), 3 (3189). Fish-hook sinker of quartz diorite from the mouth of Kavran River.
4 (3190). Fish-hook sinker of diabase porphyrite from the mouth of Kavran River.
5 (3191), 6 (3192). Fish-hook sinker of volcanic andesitic tuff with a drilled hole, from mouth of Kavran River.
7 (3193). Fish-hook sinker of volcanic andesitic tuff grooved all around, from Kuril Lake.
8 (3194). A stone pestle of quartzite for grinding food, from Kuril Lake.

(P.99)

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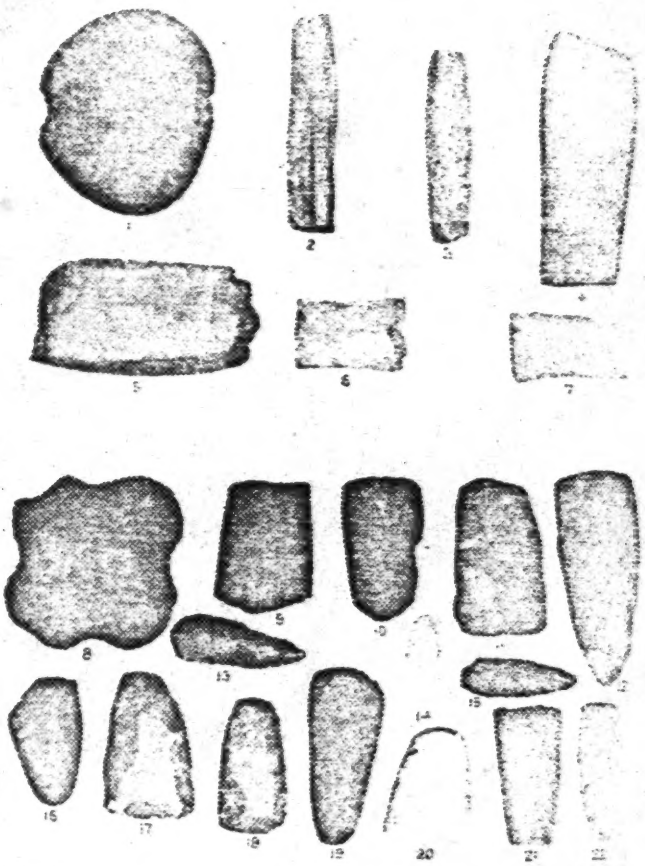
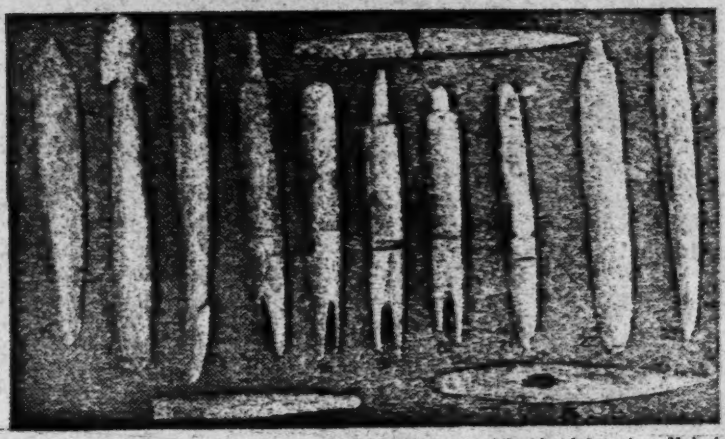


1 (3210). Fish-hook sinker of quartz diorite.
2 (3211). Whetstone of porphyrite for sharpening bone needles.
3 (3212). Whetstone of slate for polishing bone implements.
4 (3213). Whetstone of porphyrite for polishing stone implements.
5 (3214). Whetstone of tachylite tuff.
6 (3215), 7 (3216). Whetstone of slate.
8 (3195). Fish-hook sinker of diabase porphyrite.
9 (3196), 10 (3197). Fragment of an adze of dark-green quartz schist.
11 (3198). Adze of green quartz schist, unfinished.
12 (3199). Adze of jasper, partly polished.
13 (3200). Drill point of hornstone schist.
14 (3201). Small chisel of light-green quartz schist.
15 (3202). Small arrow point of andesite obsidian.
16 (3203). Fragment of an adze of green quartz schist.
17 (3204), 18 (3205). Adze of green quartz schist, partly polished.
19 (3206). Adze of dark reddish jasper, polished.
20 (3207). Adze of light-green quartz schist.
21 (3208). Fragment of an adze of dark-green quartz schist.
22 (3209). Chisel of quartz schist, only the edge is polished.

All the specimens of this plate were obtained in excavations on the shores of the Kuril Lake. Two-fifths natural size, the largest specimen is 132 mm. long.



1 to 7 (3090–3096). Bone awls for splitting sinews of reindeer and sea-mammals into threads for sewing. Made of the bones of bird wings, mostly wild geese and swans.
8 to 10 (3097–3099). Bone awls of birds' legbones, used when sewing skins.
11, 12 (3100–3101). Bone awls made of birds' shoulder blades.
13 (3102). Awl made of wing bone of a swan. Both ends may be used when sharpened.
14 to 16 (3103–3105). Bone heads of bow arrows, partly decayed.
17 to 23 (3106–3112). Bone foreshafts of bow arrows. The stem of the foreshaft entered into a socket of the wooden shaft. A sinew cord was lashed around this joint. The upper end of the foreshaft is bifurcated to receive a stone blade. The stem of the blade was glued to the bifurcation and fastened by a sinew thread, lashed around the foreshaft, on which notches are to be seen for attaching the lashing thread. The bone foreshafts are partly decayed.
24 (3113), 25 (3114). Broken bone point which could be used as a head of an arrow of a bow or as a central prong of a dart for water birds. Figure 24 is in a decayed state.
26 (3115). Represents a head of a harpoon.

All specimens were obtained in excavations on the shores of the Kuril Lake. Three-fifths natural size.

[A 101]

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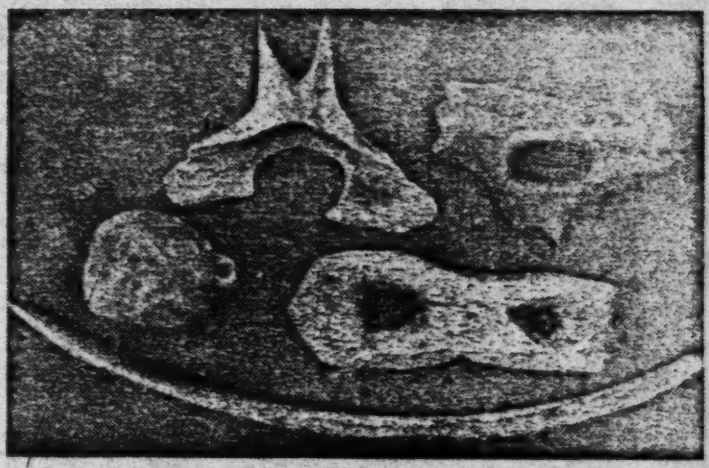
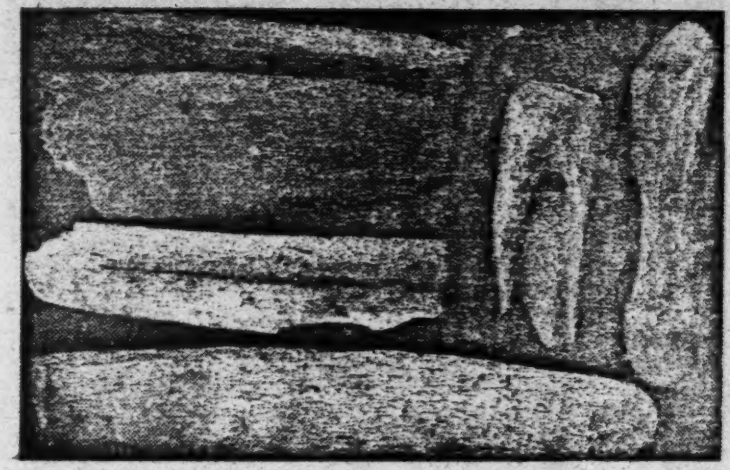


A



B

A. 1 (3124). Bone marline-spike for untying knots.
2 (3125). Similar implement with broken-off ends.
3 (3126). Bone ball with an ear for hanging, possibly as a decoration to woman's dress.
4 (3127). Bone implement for unknown purpose. It may have been used as a thong-drawer, or to attach dogs to a post.
5 (3128). Bone root-digger.

B. (3129-3133) Fragments of decayed bone implements.

All bone implements of this plate were discovered in pits of old dwellings on the shore of Kuril Lake. Three-fifths natural size.

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JOCHELSON PLATE 14

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1 (2211). Small lamp of quartz slate. Nalachevo Lake.
2 (2232). Cemented fragments of lamp of diorite. Kuril Lake.
3 (3136). Lamp of quartz slate. From Kuril Lake.
4 (3137). Lamp of quartzite. From Kuril Lake.
5 (3126). Lamp of sandstone. From Kuril Lake.
6 (3139). Lamp of quartz schist. From Kuril Lake.
7 (2921). Lamp of quartz schist. From Kavran site.
8 (2922). Lamp of quartzite. From Kavran.
9 (2923). Lamp of quartz slate. From Kavran.
10 (3142). Lamp of quartz slate. From Kuril Lake.
11 (3144). Lamp of quartzite. From Kuril Lake.
12 (3145). Lamp of quartz schist. From Kuril Lake.

Figures 1, 2 half natural size, figures 3 to 12 two-fifths natural size.

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1 (3160). Lamp of andesitic lava.
2 (3161). Lamp of quartz schist.
3 (3162). Lamp of andesitic lava.
4 (3163). Lamp of quartz schist.
5 (3164). Lamp of quartzite.
6 (3165). Lamp of andesitic lava.
7 (3166). Lamp of quartz schist.
8 (3167). Lamp of quartzite.

All specimens from Kuril Lake. About two-fifths natural size.

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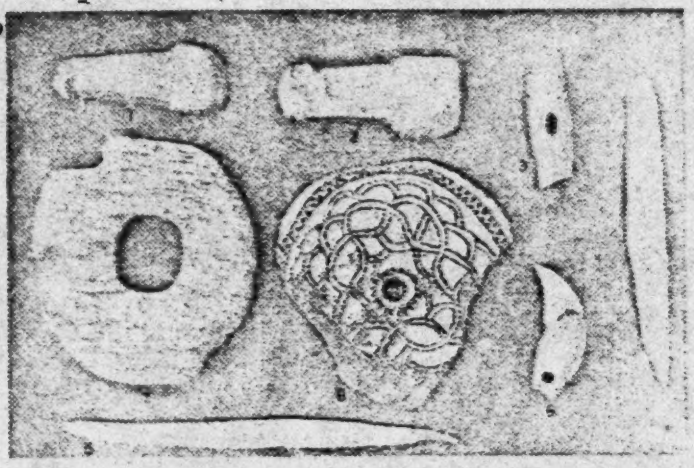

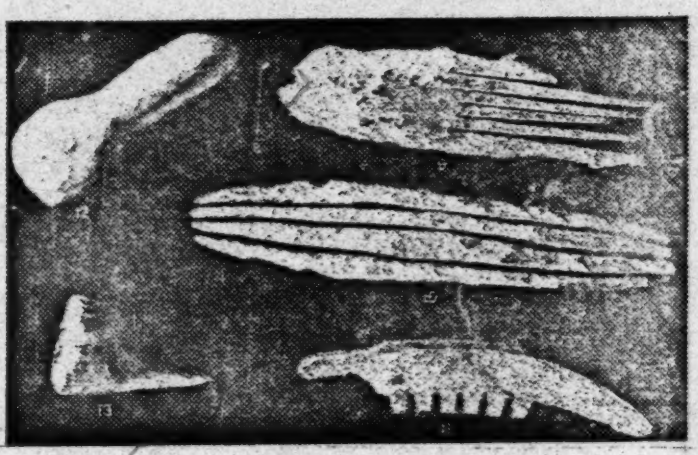

1, 2. Unknown bone implements. May be stamps to decorate clay pots when the clay is still wet.
3. Fragment of harpoon-bone head.
4 and 5. Seem to be decayed bone prongs of a bird dart.
6. A perforated seal's tooth, worn as ornament.
7. Bone belt-buckle without decoration.
8. Bone belt-buckle ornamented with engraved zigzags, interwoven curves and circles.
9. Half decayed bone comb.
10. Comb-like bone implement, as it seems to the author, for impressing parallel lines under the rim of clay pots.
11. Bone implement for stamping clay pots, as shown on potsherds on Plates 17 and 18.
12. Bone implement for making fillets under the rim.
13. Bone implement for ornamenting clay pots by puncturing.

[P. 105]

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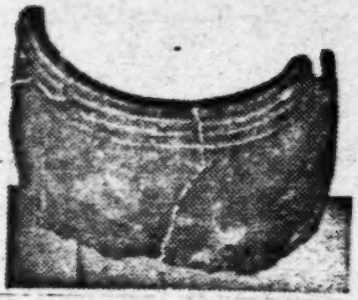

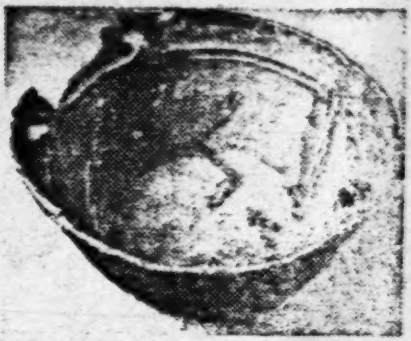

1. Clay pot with ears inside; discovered by the author in a pit of an old Kamchadal dwelling on the shore of Nalacheva Lake. The pot was split in two places, but complete, and later cemented by the author. The splitting may be regarded as a result of freezing and thawing of the soil. It was discovered at the depth of 3 feet 4 inches. Digging was done with great care. When a piece of the rim appeared, the spade was discarded and the earth from and around the pot was taken out by the hands. For the dimensions of the pot see p. 48.
2. Similar clay pot of smaller size, discovered in a pit on the Nalacheva Cape.
3. Portion of upper part of a clay pot without handles inside. It consists of three fragments cemented together by the author. No other pieces of the same pot were discovered and we do not know whether its bottom was flat or rounded. Outer parallel lines made by a comb-like implement are similar to inner parallel lines of pots with handles inside.

[A 106]

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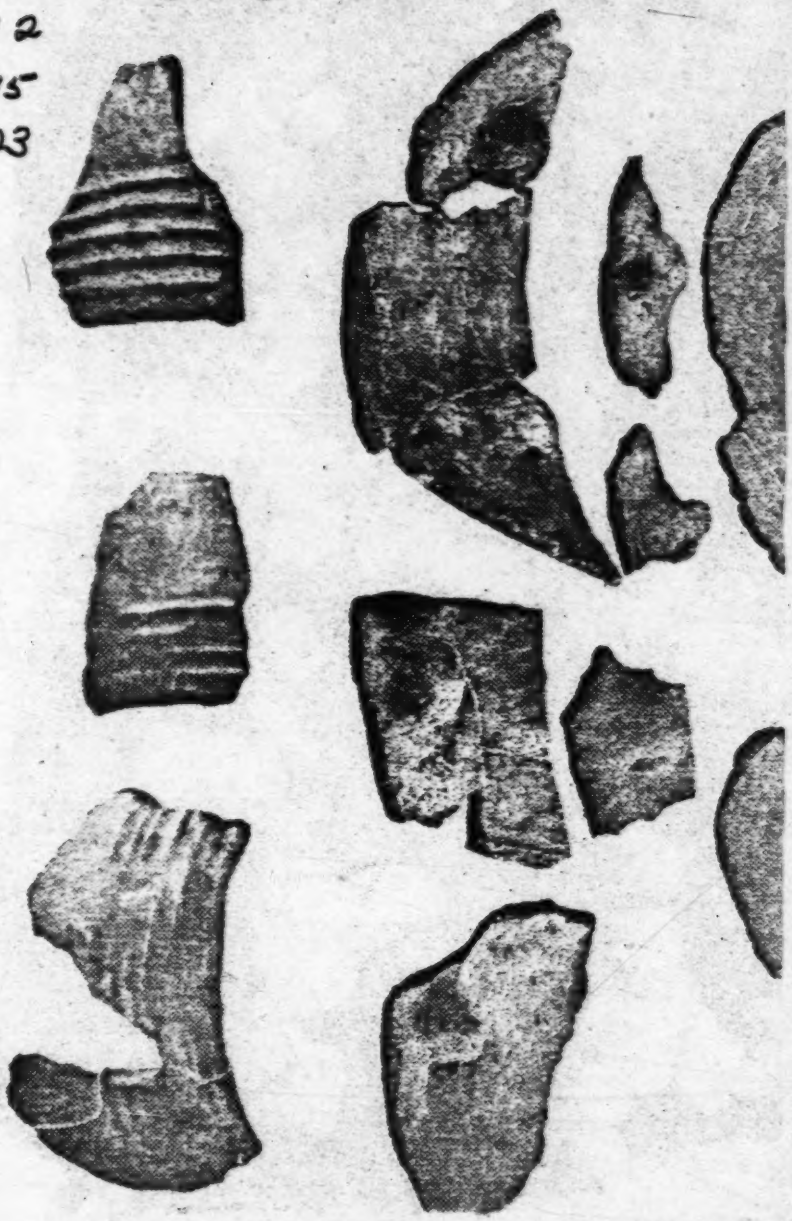

Fragments of clay pots, some with ears inside. From Naiarbeva Cape, Naiarbeva Lake, and shores of Kuril
Some of these fragments have no parallel lines inside.

[R 102]

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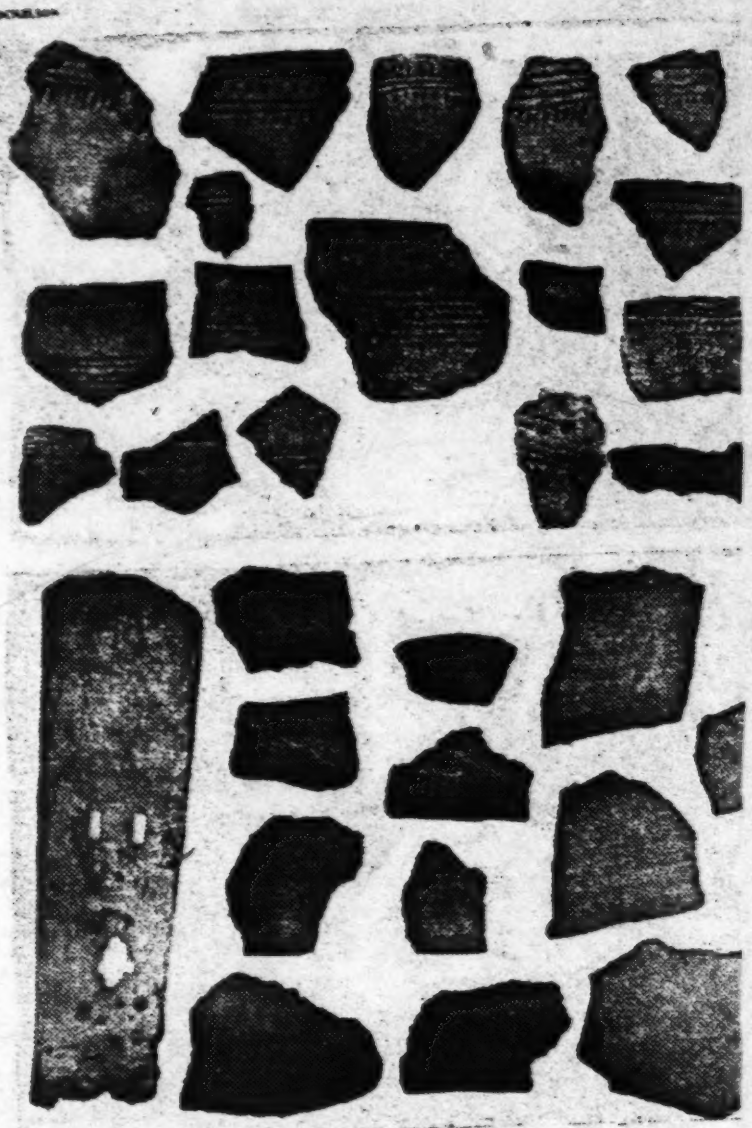

A (2704). 18 fragments of pottery discovered in the site of Kalki River.
B (2869–2873). 12 fragments of pottery found in excavations of the banks of Kavran River and a fragment some bone implement.

6: Antropova E-4 (no date) 1964 RY3 Kamchatka RY3

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[Title Page]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926–27 set
161 the number of Itel'mens at 814.

101 The term Itel'men means "resident," "living man." In the documents and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

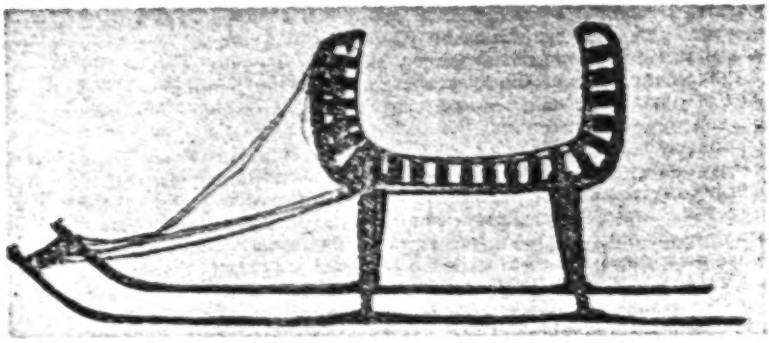
Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

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Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

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105 The Itel'mens believed in evil mountain and forest
[1776] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[1793] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[1764] The bodies of dead adults were given to the dogs to eat; children were
[1756] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[1799] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 433 622 648 178 614 476

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 792

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

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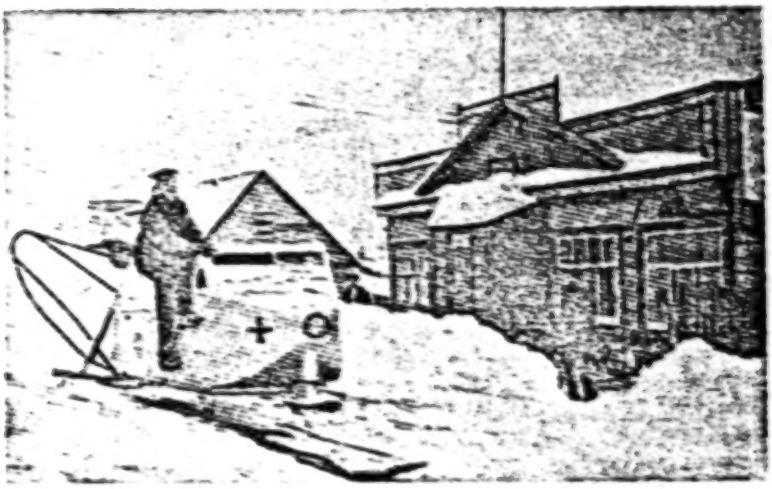

Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Rel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
[493] ever, the milk yield was very low, and livestock mortality was high.

From the Russians, the Rel'mens obtained improved means of production: firearms, nets, etc. Stone and bone implements were completely
175 abandoned in favor of metal ones. Russian clothing and utensils began to
179 come into use. The primitive semidugout was gradually (and by the begin-
648 ning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Rel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Rel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Rel'men.

In the early 20th century, the condition of the Rel'mens deteriorated in
175 consequence of the development of the Japanese capitalist fishing industry
648 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
226 spawning runs caused almost annual failures of the native catch and led to
231 inevitable famines.

Contemporary Life of the Rel'mens

175 During the civil war in the Far East, the Rel'mens actively helped the
648 guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

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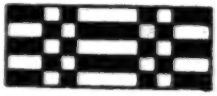
At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



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TRAVELS

IN

KAMTSCHATKA,

DURING THE YEARS 1787 AND 1788.

TRANSLATED FROM THE FRENCH OF

M. DE LESSEPS, CONSUL OF FRANCE,

AND

INTERPRETER TO THE COUNT DE LA PEROUSE, NOW ENGAGED IN A VOYAGE ROUND THE WORLD, BY COMMAND OF HIS MOST CHRISTIAN MAJESTY.

IN TWO VOLUMES.

VOLUME I.

LONDON:

PRINTED FOR J. JOHNSON, ST. PAUL'S CHURCH-YARD.

1790.

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TRAVELS

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000 attempt by land, and the paſſage by ſea was not leſs dangerous; beſides there was no veſſel either in the port of Saint Peter and Saint Paul, or of Bolcheretſk *.

M. Koſloff had his affairs to ſettle, which, with the preparations for our departure, detained us ſix days longer, and afforded me time to ſatisfy myſelf that the frigates were not likely to return. I embraced this opportunity of commencing my obſervations, and making minutes of every thing
361 about me. I attended particularly to the
712 bay of Avatcha, and the port of Saint Peter
R and Saint Paul, in order to give a juſt idea
177
. 71 of them.

This bay has been minutely deſcribed by captain Cook, and we found his account to be accurate. It has ſince undergone ſome

* The navigation is ſufficiently ſafe in ſummer, and is the only mode of travelling that is adopted.

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alterations; which, it is ſaid, are to be followed by many others; particularly as to the port of Saint Peter and Saint Paul. It is poſſible indeed, that the very next ſhip which ſhall arrive, expecting to find only five or ſix houſes, may be ſurpriſed with the ſight of an entire town, built of wood, but tolerably fortified.

Such at leaſt is the projected plan, which, as I learned indirectly, is to be aſcribed to M. Kaſloff, whoſe views are equally great, and conducive to the ſervice of his miſtreſs. The execution of this plan will contribute not a little to increaſe the celebrity of the port, already made famous by the foreign veſſels which have touched there, as well as by its favourable ſituation for commerce *.

To

* According to the accounts of the earlieſt navigators, it is the moſt commodious port in this part of Aſia, and ought to be the general depôt for the commerce of the country. This would be ſo much the more advantageous, as the veſſels which frequent the other ports, commonly conſider themſelves

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To understand the nature, and estimate the utility of this project, nothing more is necessary

selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

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An English ship, belonging to M. Lanz, a merchant of Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had sailed, in

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neceſſary than to have an idea of the extent and form of the bay of Avatſcha, and the port in queſtion. We have already many accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

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in order to begin its cargo, which it expected to complete at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

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ſchatka is built. Upon an eminence to the eaſt, at the moſt interior point of the bay, is the houſe of the governor *, with whom M. Kaſloff reſided during his ſtay. Near this houſe, almoſt in the ſame line, is that of a corporal of the garriſon, and a little higher inclining to the north, that of the ſerjeant, who, next to the governor, are the only perſons at all diſtinguiſhed in this ſettlement, if indeed it deſerves the name of ſettlement. Oppoſite to the entrance of the port, on the declivity of the eminence, from which a lake of conſiderable extent is ſeen, are the ruins of the hoſpital mentioned in captain Cooke's voyage †. Below theſe,

Ruſſians to protect them from the incurſions of the natives, who, doubtleſs, did not paſſively ſuffer their country to be invaded. The appellation of oſtrog is now given to almoſt all the villages in this country.

* His name was Khabaroff, and he had the rank of a *prépoſchik*, or enſign.

† At a little diſtance from this ſpot was buried, at the foot of a tree, the body of captain Clerke. The inſcription which

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these, and nearer the shore, is a building which serves as a magazine to the garrison, and which is constantly guarded by a centinel. Such was the state in which we found the port of St. Peter and St. Paul.

By the proposed augmentation, it will evidently become an interesting place. The entrance was to be closed, or at least flanked by fortifications, which were to serve at the same time as a defence, on this side, to the projected town, which was chiefly to

which the English placed upon his tomb, was on wood, and liable to be effaced. Count de la Perouse, desirous that the name of this navigator should be immortalised, without having any thing to fear from the injuries of the weather, substituted instead of it an inscription on copper.

It is needless to mention, that he enquired at the same time where the famous French astronomer, from the island of Croyere, had been buried. He entreated M. Kasloff to order a tomb to be erected, and an epitaph, which he left engraved on copper, to be placed on it, containing an elogy, and the circumstances of the death of our countryman. I saw his intentions carried into execution after the departure of the French frigates.

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be built upon the ſite of the old hoſpital; that is, between the port and the lake. A battery alſo was to be erected upon the neck of land which ſeparates the bay from the lake, in order to protect the other part of the town. In ſhort, by this plan, the entrance of the bay would be defended by a ſufficiently ſtrong battery upon the leaſt elevated point of the left coaſt; and veſſels entering the bay could not eſcape the cannon, becauſe of the breakers on the right. There is at preſent upon the point of a rock, a battery of ſix or eight cannon, lately erected to ſalute our frigates.

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I need not add, that the augmentation of the garriſon forms a part of the plan, which conſiſts only at preſent of forty ſoldiers, or Coſſacs. Their mode of living and their dreſs are ſimilar to the Kamtſchadales, except that in time of ſervice they have a ſabre, firelock, and cartouch box; in other

reſpects

563 respects they are not distinguishable from the indigenes, but by their features and idiom.

161 With respect to the Kamtschadale vil-
361 lage, which forms a considerable part of the place, and is situated, as I have already said, upon the narrow projection of land which closes in the entrance of the port, it is at present composed of from thirty to forty habitations, including winter and summer ones, called *isbas* and *balagans*; and the number of inhabitants, taking in the garrison, does not exceed a hundred, men, women and children. The intention is to increase them to upwards of four hundred.

13 To these details respecting the port of St. Peter and St. Paul, and its destined improvements, I shall add a few remarks upon the nature of the soil, the climate, and the rivers.

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13 rivers. The banks of the bay of Avatſcha are rendered difficult of acceſs by high mountains, of which ſome are covered with wood, and others have volcanos*. The valleys preſent a vegetation that aſtoniſhed me. The graſs was nearly of the height of a man; and the rural flowers, ſuch as the wild roſes and others that are interſperſed with them, diffuſe far and wide a moſt grateful ſmell.

The rains are in general heavy during ſpring and autumn, and blaſts of wind are frequent in autumn and winter. The latter is ſometimes rainy; but notwithſtanding its length, they aſſured me that its ſeverity is not very extreme, at leaſt in this

* There is a volcano about fifteen or twenty werſts from the port, which the naturaliſts who accompanied count de la Perouſe viſited, and which will be mentioned in his voyage. The inhabitants informed me that ſmoak often iſſued from it, but that an eruption, which uſed to be frequent, had not happened for many years.

ſouthern

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13 ſouthern part of Kamtſchatka*. The ſnow begins to appear on the ground in October, and the thaw does not take place till April or May; but even in July it is ſeen to fall upon the ſummit of high mountains, and particularly volcanos. The ſummer is tolerably fine; the ſtrongeſt heats ſcarcely laſt beyond the ſolſtice. Thunder is ſeldom heard, and is never productive of injury.

* The exceſſive cold of which the Engliſh complain, may not be without example; and I pretend not to contradict them. But as a proof that the rigour of the climate is not ſo very piercing, the inhabitants, whom they repreſent as not daring to come out of their ſubterraneous dwellings, or *yourts*, during the whole winter, for fear of being frozen, no longer conſtruct any of theſe caves in this ſouthern part of the peninſula, as I ſhall have occaſion to obſerve elſewhere. I acknowledge, however, that the cold which I experienced during my abode there, and which may be compared to that of the winter of 1779, appeared to me very ſimilar to what is felt at Saint Peterſburg. What the Engliſh muſt have had reaſon to ſuppoſe extraordinary, are the dreadful hurricanes, which bring on ſuch thick and heavy ſtorms of ſnow, that it is not poſſible either to venture out, or to advance, if we are on a journey. I experienced this more than once, as will be ſeen in the ſequel.

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13 Such is the temperature of almoſt all this part of the peninſula.

Two rivers pour their waters into the bay of Avatſcha; that from which the bay is named, and the Paratounka. They both abound with fiſh, and every ſpecies of water fowl, but theſe are ſo wild, that it is not poſſible to approach within fifty yards of them. The navigation of theſe rivers is impracticable after the 26 November, becauſe they are always frozen at this time; and in the depth of winter the bay itſelf is covered with ſheets of ice, which are kept there by the wind blowing from the ſea; but they are completely diſpelled as ſoon as it blows from the land. The port of St. Peter and St. Paul is commonly ſhut up by the ice in the month of January.

I ſhould doubtleſs ſay ſomething in this place of the manners and cuſtoms of the Kamt-

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000 ſuperior, joined our little troop, and we embarked upon *baidars* *, in order to croſs the bay and reach Paratounka, where we were to be ſupplied with horſes to proceed on our route.

In five or ſix hours we arrived at this oſtrog, where the prieſt †, or rector of the diſtrict reſides, and whoſe church alſo is in this place ‡. His houſe ſerved us for a lodg-

ing,

abode there, and prove to him that the Engliſh are not the only foreigners intereſted in his ſorrowful lot.

501 * *Baidars* are boats ſomewhat ſimilar to European ones, except that the ſides are made of planks from four to ſix inches wide, and faſtened together with withies or cords; and that they are caulked with moſs. The baidars are the only veſſels made uſe of to ſail to the Kurilles iſlands; they are commonly rowed, but will admit of a ſail.

† His name is *Feodor Vereſchaguin*; he ſucceeded his eldeſt brother Romanoff Vereſchaguin, who ſhewed ſo many civilities to captain Clerke, and whom I afterwards found at Bolcheretſk.

‡ His predeceſſor had informed the Engliſh that this pariſh was to be immediately transferred to the oſtrog of St. Peter

000 ing, and we were treated with the utmoſt hoſpitality; but we had ſcarcely entered when the rain fell in ſuch abundance, that we were obliged to ſtay longer than we wiſhed.

I eagerly embraced this ſhort interval to deſcribe ſome of the objects which I had deferred till my arrival at Bolcheretſk, where, perhaps, I may find others that will not be leſs intereſting.

361 164 133 The oſtrog of Paratounka is ſituated by the ſide of a river of that name, about two leagues from its mouth *. This village is ſcarcely

Peter and St. Paul; but this cannot take place till the projected improvements reſpecting the port are carried into execution. We cannot help obſerving, that the Engliſh have omitted to mention that there was formerly a church at St. Peter and St. Paul's, and that its ſituation is known by means of a ſort of tomb which formed a part of it.

* This river empties itſelf, as I have already ſaid, into the bay of Avatſcha. The ſhoals, which are commonly dry

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ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavlofska*.

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The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

they

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they ſhould be brought gradually to reſemble the Ruſſian peaſants, they are prohibited, in this ſouthern part of Kamtſchatka, from conſtructing any more *yourts*, or ſubterraneous habitations; theſe are all deſtroyed at preſent*, a few veſtiges only remain of them, filled up within, and appearing externally like the roofs of our ice-houſes.

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The balagans are elevated above the ground upon a number of poſts, placed at equal diſtances, and about twelve or thirteen feet high. This rough ſort of colonnade ſupports in the air a platform made of rafters, joined to one another, and overſpread with clay: this platform ſerves as a floor to the whole building, which conſiſts of a roof in the ſhape of a cone, covered with a kind

* I met with ſome afterwards in the northern part, which I took care to examine, and have deſcribed in their proper place.

of

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342 of thatch, or dried grafs, placed upon long
354 poles faftened together at the top, and bear-
511 ing upon the rafters. This is at once the
417 firft and laft ftory; it forms the whole apart-
ment, or rather chamber: an opening in
the roof ferves inftead of a chimney to let
out the fmoke, when a fire is lighted to
drefs their victuals; this cookery is per-
formed in the middle of the room, where
they eat and fleep pell-mell together with-
out the leaft difguft or fcruple. In thefe
apartments, windows are out of the quef-
tion; there is merely a door, fo low and
narrow, that it will fcarcely fuffice to ad-
mit the light. The ftair-cafe is worthy of
the reft of the building; it confifts of a
beam, or rather a tree jagged in a flovenly
manner, one end of which refts on the
ground, and the other is raifed to the height
of the floor. It is placed at the angle of
the door, upon a level, with a kind of open
gallery that is erected before it. This tree
retains

417 retains its roundneſs, and preſents on one
576 ſide ſomething like ſteps, but they are ſo incommodious that I was more than once in danger of breaking my neck. In reality, whenever this vile ladder turns under the feet of thoſe who are not accuſtomed to it, it is impoſſible to preſerve an equilibrium; a fall muſt be the conſequence, more or leſs dangerous, in proportion to the height. When they wiſh perſons to be informed that there is nobody at home, they merely turn the ſtair-caſe, with the ſteps inward.

251 Motives of convenience may have ſuggeſted to theſe people the idea of building ſuch ſtrange dwellings, which their mode of living renders neceſſary and commodious. Their principal food being dried fiſh, which is alſo the nouriſhment of their dogs, it is neceſſary, in order to dry their fiſh, and other proviſions, that they ſhould have

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251 have a place ſheltered from the heat of the
231 ſun, and at the ſame time perfectly expoſed to the air. Under the collonnades or ruſtic porticos, which form the lower part of their balagans, they find this convenience; and there they hang their fiſh, either to the ceiling or to the ſides, that it may be out of the reach of the voracioufneſs of their dogs. The Kamtſchadales make uſe of dogs* to draw their ſledges; the beſt, that is the moſt vicious, have no other kennel than what the portico of the balagans affords them, to the poſts of which they are tied. Such are the advantages reſulting from the ſingular mode of conſtructing the balagans, or ſummer habitations of the Kamtſchadales.

Thoſe of winter are leſs ſingular; and if

* As I ſhall ſoon be obliged to adopt this mode of travelling, I ſhall defer my deſcription of the dogs till that period.

equally

Those of winter are less singular; and if
equally large, would exactly resemble the
342 habitations of the Russian peasants. These
177 have been so often described, that it is univer-
352 sally known how they are constructed and
513 arranged. The isbas are built of wood;
562 that is to say, the walls are formed by plac-
ing long trees horizontally upon one an-
other, and filling up the interstices with
clay. The roof slants like our thatched
houses, and is covered with coarse grass, or
rushes, and frequently with planks. The
interior part is divided into two rooms, with
a stove placed so as to warm them both, and
which serves at the same time as a fire-
place for their cookery. On two sides of
the largest room, wide benches are fixed,
and sometimes a sorry couch made of
planks, and covered with bears skin. This
is the bed of the chief of the family: and
the women, who in this country are the
slaves of their husbands, and perform all
the

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562 the moſt laborious offices, think themſelves
352 happy to be allowed to ſleep in it.

Beſides theſe benches and the bed, there is alſo a table, and a great number of images of different ſaints, with which the Kamtſchadales are as emulous of furniſhing their chambers, as the majority of our celebrated connoiſſeurs are of diſplaying their magnificent paintings.

342 The windows, as may be ſuppoſed, are
237 neither large or high. The panes are made of the ſkins of ſalmon, or the bladders of various animals, or the gullets of ſea wolves prepared, and ſometimes of leaves of talc; but this is rare, and implies a ſort of opulence. The fiſh ſkins are ſo ſcraped and dreſſed that they become tranſparent, and admit a feeble light to the room*;

* They produce an effect ſomewhat ſimilar to the oiled paper in the windows of our manufactories.

but

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317 but objects cannot be ſeen through them.
342 The leaves of talc are more clear, and approach nearer to glaſs; in the mean time they are not ſufficiently tranſparent for perſons without to ſee what is going on within: this is manifeſtly no inconvenience to ſuch low houſes.

622 Every oſtrog is preſided by a chief, called
554 *toyon*. This kind of magiſtrate is choſen
R from among the natives of the country,
177 by a plurality of voices. The Ruſſians
.62 have preſerved to them this priviledge, but the election muſt be approved by the juriſdiction of the province. This toyon is merely a peaſant, like thoſe whom he judges and governs; he has no mark of diſtinction, and performs the ſame labours as his ſubordinates. His office is chiefly to watch over the police, and inſpect the execution of the orders of government. Under him is another Kamtſchadale, choſen

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by the toyon himſelf, to aſſiſt him in the exerciſe of his functions, or ſupply his place. This vice-toyon is called *yeſaoul*, a Coſſac title adopted by the Kamtſchadales ſince the arrival of the Coſſacs in their peninſula, and which ſignifies ſecond chief of their band or clan. It is neceſſary to add, that when the conduct of theſe chiefs is conſidered as corrupt, or excites the complaints of their inferiors, the Ruſſian officers preſiding over them, or the other tribunals eſtabliſhed by government, diſmiſs them immediately from their functions, and nominate others more agreeable to the Kamtſchadales, with whom the right of election ſtill remains.

ooo The rain continuing, we were unable to proceed on our journey; but my curioſity led me to embrace a ſhort interval that offered in the courſe of the day, to walk

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000 of bears, who are attracted by the fish with which these rivers abound. The inhabitants assured me, that fifteen or eighteen were frequently seen together upon these banks, and that whenever they hunted them, they were sure to bring back one or two, at least, in the space of twenty-four hours. I shall soon have occasion to speak of their chace, and their weapons.

133 We quitted Paratounka and resumed our
501 journey; twenty horses sufficed for ourselves and our baggage, which was not considerable, M. Kasloff having taken the precaution of sending a great part of it by water, as far as the ostrog of Koriaki. The river Avatscha has no tide, and is not navigable farther than this ostrog; and not at all indeed, except by small boats, called *batts*. The baidirs only serve to cross the bay of Avatscha; and can proceed no farther than the mouth of the river, where

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133 their lading is put into these batts, which,
501 from the shallowness and rapidity of the water, are pushed forward with poles. It was in this manner our effects arrived at Koriaki.

000 As to ourselves, having crossed the river Paratounka at a shallow, and winded along several of its branches, we left it for a way that was woody and less level, but which afforded us better travelling; it was almost entirely in valleys, and we had only two mountains to climb. Our horses, notwithstanding their burthens, advanced very briskly. We had no reason to complain of the weather for a single moment; it was so fair, that I began to think the rigour of the climate had been exaggerated; but shortly after, experience too well convinced me of its truth, and in the sequel of my journey, I had every reason to accustom myself to the most piercing frosts, too happy when

000 when in the midſt of ice and ſnow, that I had not to contend with the violence of whirlwinds and tempeſts.

We were about ſix or ſeven hours in going from Paratounka to Koriaki, which, as far as I could judge, is from thirty-eight to forty werſts. Scarcely arrived, we were obliged to take refuge in the houſe of the *toyon*, to ſhelter ourſelves from the rain; he ceded his iſba to M. Kaſloff, and we ſpent the night there.

361 The oſtrog of Koriaki is ſituated in the midſt of a coppice wood, and upon the border of the river Avatſcha, which becomes very narrow in this part. Five or ſix iſbas, and twice, or at moſt three times the number of balagans, make up this village, which is ſimilar to that of Paratounka, except that it is leſs, and has no pariſh church. I obſerved in general that oſtrogs of ſo little

361 conſideration were not provided with a church.

361 The next day we mounted our horſes
515 and took the way to Natchikin, another oſtrog in the Bolcheretſk route. We were to ſtop a few days in the neighbourhood for the ſake of the baths, which M. Kaſloff had conſtructed at his own expence, for the benefit and pleaſure of the inhabitants, upon the hots ſprings that are found there, and which I ſhall preſently deſcribe. The way from Koriaki to Natchikin is tolerably commodious, and we croſſed without difficulty all the little ſtreams that fall from the mountains, at the foot of which we paſſed. About three-fourths of the way we met the Bolchaia-reka *; from the ſite of its greateſt breadth, which in this place is about ten or twelve yards, it appears to wind to a conſiderable extent to the north eaſt; we jour-

* A Ruſſian name which ſignifies, *large river.*

neyed

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000 neyed on its bank for ſome time, till we
came to a little mountain, which we were
obliged to paſs over in order to reach the
village. A heavy rain which came on as
we left Koriaki, ceaſed a few minutes after;
but the wind having changed to the north-
weſt, the heavens became obſcured, and we
had abundance of ſnow; we were about
two-thirds of our way, and it continued till
361 our arrival. I remarked that the ſnow al-
515 ready covered the mountains, even ſuch as
were loweſt, upon which it deſcribed an
equal line at a certain elevation, but that
below them no traces of it were yet per-
ceptible. We forded the Bolchaia-reka,
and found on the other ſide the oſtrog of
Natchikin, where I counted ſix or ſeven
iſbas and twenty balagans, ſimilar to what
I had ſeen before. We made no ſtay there,
M. Kaſloff thinking it proper to haſten im-
mediately to the baths, to which I was in-

515 clined as much from curioſity as from ne-
ceſſity.

000 The ſnow had penetrated through my clothes, and in croſſing the river, which was deep, I had made my legs and feet wet. I longed therefore to be able to change my dreſs, but when we came to the baths our baggage was not arrived. We propoſed drying ourſelves by walking about the environs, and obſerving the intereſting objects which I expected to find there. I was charmed with every thing I ſaw, but the dampneſs of the place, added to that of our clothes, gave us ſuch a chillineſs that we quickly put an end to our walk. Upon our return we had a new ſource of regret and impatience. Unable either to dry ourſelves or change our dreſs, our equipage not being arrived, to complete our misfortune, the place to which we had retired was the dampeſt we could have choſen, and though

it

000 it ſeemed ſufficiently ſheltered, the wind penetrated on every ſide. M. Kaſloff had recourſe to the bath, which quickly reſtored him; but not daring to follow his example, I was obliged to wait the arrival of our baggage. The damp had penetrated to ſuch a degree that I ſhivered during the whole night.

133 515 312 343 The next day I made a trial of theſe baths, and can ſay that none ever afforded me ſo much pleaſure or ſo much benefit. But before I proceed, I muſt deſcribe the ſource of theſe hot waters, and the building conſtructed for bathing.

They are two werſts to the north of the oſtrog, and about a hundred yards from the bank of the Bolchaia-reka, which it is neceſſary to croſs a ſecond time in order to arrive at the baths, on account of the elbow which the river deſcribes below the village. A thick and

[Natchikin (Nachiki?)--Analyst]

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133 and continual vapour aſcends from theſe
515 waters, which fall in a rapid caſcade from a
312
343 rather ſteep declivity, three hundred yards from the place where the baths are erected. In their fall, which is in a direction eaſt and weſt, they form a ſmall ſtream of a foot and half deep, and ſix or ſeven feet wide. At a little diſtance from the Bolchaia-reka, this ſtream is met by another, with which it pours itſelf into this river. At their conflux, which is about eight or nine hundred yards from the ſource, the water is ſo hot that it is not poſſible to keep the hand in it for half a minute.

M. Kaſloff has been careful to erect his building on the moſt convenient ſpot, and where the temperature of the water is moſt moderate. It is conſtructed of wood, in the middle of a ſtream, and is in the proportion of ſixteen feet long by eight wide. It is divided into two apartments, each of ſix

or

133 or ſeven ſeet ſquare, and as many high:
312 the one which is neareſt to the ſide of
515 the ſpring, and under which the water is
343 conſequently warmer, is appropriated for bathing; the other ſerves for a dreſſing-room; and for this purpoſe there are wide benches above the level of the water; in the middle alſo a certain ſpace is left to waſh if we be diſpoſed. There is one circumſtance that renders theſe baths very agreeable, the warmth of the water communicates itſelf ſufficiently to the dreſſing-room to prevent us from catching cold; and it penetrates the body to ſuch a degree, as to be felt even for the ſpace of an hour or two after we have left the bath.

We lodged near theſe baths in a kind of barns, covered with thatch, and whoſe timber work conſiſted of the trunks and branches of trees. We occupied two, which had been built on purpoſe for us, and

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000 and in ſo ſhort a time, that I knew not how to credit the report; but I had ſoon the conviction of my own eyes. That which was to the ſouth of the ſtream, having been found too ſmall and too damp, M. Kaſloff ordered another of ſix or eight yards extent, to be built on the oppoſite ſide, where the ſoil was leſs ſwampy. It was the buſineſs of a day; in the evening it was finiſhed, though an additional ſtaircaſe had been cut out to form a communication between the barn and the bathing houſe, whoſe door was to the north.

Our habitations being inſupportable during the night, on account of the cold, M. Kaſloff reſolved to quit them, four days after our arrival. We returned to the village to ſhelter ourſelves with the toyon; but the attraction of the baths led us back every day, oftener twice than once, and we ſcarcely ever came away without bathing.

The

177 The various conſtructions which M.
515 Kaſloff ordered for the greater convenience
757 of his eſtabliſhment, detained us two days
823 longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of diſ-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

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312 " Water in general may contain,

" 1. Fixed air; in that caſe it has a " ſharp and ſourifh taſte, like lemonade, " without ſugar.

" 2. Iron or copper; and then it has " an aſtringent and diſagreeable taſte, like " ink.

" 3. Sulphur, or ſulphurous vapours; and " then it has a very nauſeous taſte, like " a ſtale and rotten egg.

" 4. Vitriolic, or marine, or alkaline ſalt.

" 5. Earth."

Fixed Air.

" To aſcertain the fixed air, the taſte is " partly ſufficient; but pour into the water " ſome tincture of turnſol, and the water " will

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312 " will become more or lefs red, in propor-
" tion to the quantity of fixed air it con-
" tains."

Iron.

" The iron may be known by means of
" the galnut and phlogifticated alkali; the
" galnut put into feruginous water, will
" change its colour to purple, or violet, or
" black; and the phlogifticated alkali will
" produce immediately Pruffian blue."

Copper.

" Copper may be afcertained by means
" of the phlogifticated alkali or volatile al-
" kali; the firft turns the water to a brown
" red, and the fecond to a blue. The laft
" mode is the fureft, becaufe the volatile
" alkali precipitates copper only, and not
" iron."

Sulphur.

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Sulphur.

312 " Sulphur and ſulphurous vapours may " be known by pouring, 1. nitrous acid into " the water; if a yellowiſh or whitiſh ſedi- " ment be formed by it, there is ſulphur, and " at the ſame time a ſulphurous odour will " be exhaled and evaporate. 2. By pouring " ſome drops of a ſolution of corroſive ſubli- " mate; if it occaſion a white ſediment, the " water contains only vapours of liver of " ſulphur; and if the ſediment be black, the " water contains ſulphur only.

Vitriolic Salt.

" Water may contain vitriolic ſalts; that " is ſalts reſulting from the combination of " the vitriolic acid with calcareous earth, " iron, copper, or with an alkali. The vi- " triolic acid may be aſcertained by pouring " ſome drops of a ſolution of heavy earth; " for then a ſandy ſediment will be formed, " which will ſettle ſlowly at the bottom of " the veſſel.

Marine

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 *Marine Salt.*

" Water may contain marine ſalt, which " may be aſcertained by pouring into it ſome " drops of a ſolution of ſilver; a white ſedi- " ment will immediately be formed of the " conſiſtency of curdled milk, which will at " laſt turn to a dark violet colour.

Fixed Alkali.

" Water may contain fixed alkali, which " may be aſcertained by pouring into it " ſome drops of a ſolution of corroſive ſub- " limate; when a reddiſh ſediment will be " formed.

Calcareous Earth.

" Water may contain calcareous earth " and magneſia. Some drops of acid of " ſugar poured into the water, will preci- " pitate the calcareous earth in whitiſh " clouds, which will at length ſubſide and

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312 " afford a white ſediment. A few drops of
" a ſolution of corroſive ſublimate, will pro-
" duce a reddiſh ſediment, but very gra-
" dually, if the water contain magneſia.

" Note. To make theſe experiments with
" readineſs and certainty, the water to be
" analyſed ſhould be reduced one half by
" boiling it, except in the caſe of the fixed
" air, which would evaporate in the boiling."

Having thoroughly ſtudied the proceſs, we began our experiments. The three firſt producing no effect, we concluded that the water contained neither fixed air, iron, nor copper; but upon the mixture of the nitrous acid, mentioned for the fourth experiment, we perceived a light ſubſtance ſettle upon the ſurface, of a whitiſh colour, and extending but a little way, which led us to believe that the quantity of ſulphur, or

of

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312 of ſulphurous vapours, muſt be infinitely ſmall.

The fifth experiment proved that the water contained vitriolic ſalts, or at leaſt vitriolic acid mixed with calcareous earth. We aſcertained the exiſtence of this acid, by pouring ſome drops of a ſolution of heavy earth into the water, which became white and nebulous, and the ſediment that ſlowly ſettled at the bottom of the veſſel appeared whitiſh and in very fine grains.

We had no ſolution of ſilver for the ſixth experiment, in order to aſcertain whether the water contained marine ſalt.

The ſeventh proved that it had no fixed alkali.

By the eighth experiment, we found that the water contained a great quantity of

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312 calcareous earth, but no magnesia. Having poured some drops of acid of sugar, we observed the calcareous earth precipitate to the bottom of the vessel in clouds and a powder of a whitish colour; we mixed afterwards some solution of corrosive sublimate to find the magnesia; but the sediment, instead of becoming red, preserved the same colour as before; a proof that the water contained no magnesia.

We made use of this water for tea and for our common drink. It was not till after three or four days that we found it contained some saline particles.

M. Kasloff boiled also some of the water taken at the spring, till it became totally evaporated; the whitish and very salt earth or powder which remained at the bottom of the vessel, as well as the effect it produced

on

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312 on us, proved that this water contained nitrous ſalts.

We remarked alſo that the ſtones taken out of this ſtream were covered with a calcareous ſubſtance tolerably thick, and of an undulated appearance, which, when mixed with the vitriolic and nitrous acid, produced ſymptoms of effervescence. We examined others taken from what appeared to be the fountain head of the waters, and where they have the greateſt degree of heat; we found them covered with a ſtratum of a kind of metal, if I may ſo call a hard and compact envelopement of the colour of refined copper, but the quality of which we could not aſcertain; we found alſo ſome of this metal, which appeared like the heads of pins; but no acid could diſſolve it. Upon breaking theſe ſtones, we diſcovered the inſide to be very ſoft and mixed with gravel,

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312 with which I had obſerved theſe ſtreams to abound.

I ought to add here, that we diſcovered upon the border of the ſtream, and in a little moving ſwamp that was near it, a gum, or ſingular *fucus* *, that was glutinous, but did not adhere to the ground.

Such are the obſervations which I made upon theſe hot waters, by aſſiſting M. Kaſloff in his experiments and enquiries. I dare not flatter myſelf with having given the reſult of our operations in a ſatisfactory manner; forgetfulneſs, or want of information upon the ſubject, may have led me into errors; I can only ſay that I have exerted all my attention and care to be accurate; but acknowledge at the ſame time,

* M. Kaſloff gave ſome of this gum to one of the naturaliſts of our expedition, the abbé Mongés, while the frigates were at Saint Peter and Saint Paul.

that

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312 that if there be defects, they are ascribable to me.

During our stay at these baths and at the ostrog of Natchikin, our horses had brought, at different times, the effects which we had left at Koriaki, and we began to make pre-
224 parations for our departure. In this interval I had an opportunity of seeing a sable taken alive; the method was very singular, and may give some idea of the manner of hunting these animals.

At some distance from the baths, M. Kasloff remarked a numerous flight of ravens, who all hovered over the same spot, skimming continually along the ground. The regular direction of their flight led us to suspect that some prey attracted them. These birds were in reality pursuing a sable. We perceived it upon a birch-tree, surrounded by another flight of ravens, and

224 we had immediately a ſimilar deſire of taking it. The quickeſt and ſureſt way would doubtleſs have been to have ſhot it; but our guns were at the village, and it was impoſſible to borrow one of the perſons who accompanied us, or indeed in the whole neighbourhood. A Kamtſchadale happily drew us from our embaraſſment, by undertaking to catch the ſable. He adopted the following method. He aſked us for a cord; we had none to give him but that which faſtened our horſes. While he was making a running knot, ſome dogs, trained to this chace, had ſurrounded the tree: the animal, intent upon watching them, either from fear, or natural ſtupidity, did not ſtir; and contented himſelf with ſtretching out his neck, when the cord was preſented to him. His head was twice in the nooſe, but the knot ſlipped. At length, the ſable having thrown himſelf upon the ground, the dogs flew to ſeize him; but he preſently freed him-

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224 himſelf, and with his claws and teeth laid hold of the noſe of one of the dogs, who had no reaſon to be pleaſed with his reception. As we were deſirous of taking the animal alive, we kept back the dogs; the ſable quitted immediately his hold, and ran up a tree, where, for the third time, the nooſe, which had been tied anew, was preſented to him; it was not till the fourth attempt that the Kamtſchadale ſucceeded *. I could not have imagined that an animal, who has ſo much the appearance of cunning, would have permitted himſelf to be caught in ſo ſtupid a manner, and would himſelf have placed his head in the ſnare
224 that was held up to him. This eaſy mode
433 of catching ſables, is a conſiderable reſource
651 to the Kamtſchadales, who are obliged to

* M. Kaſloff, who preſided in this chace, had the politeneſs to make me a preſent of this ſable, called in this country *ſobol*, and promiſed to add it to another, that I might bring a couple with me to France.

to

651 pay their tribute in ſkins of theſe animals, as I ſhall explain hereafter *.

132 Two phenomena in the heavens were obſerved at the north-weſt, during the nights of the 13 and 14. From the deſcription that was given of them, we judged that they were auroræ boreales, and we lamented that we were not informed time enough to ſee them. The weather had been tolerably fair during our ſtay at the baths; but the weſtern part of the ſky had been almoſt conſtantly charged with very thick clouds. The wind varied from weſt to north-weſt, and gave us now and then a ſhower of ſnow, which did not yet acquire conſiſtency, notwithſtanding the froſts which we experienced every night.

000 Our departure was fixed for the 17 Octo-

* Theſe ſkins are not only a conſiderable branch of commerce, but ſerve as a ſpecies of money with the Kamtſchadales.

ber,

[October, 1787--analyst]

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000 ber, and the 16 was ſpent in the hurry and buſtle which the laſt preparations generally occaſion. The reſt of our route, as far as Bolcheretſk, was to be upon the Bolchaia-reka. Ten ſmall boats, which properly ſpeaking, appeared to be merely trees ſcooped out in the ſhape of canoes, two and two laſhed together, ſerved as five floats for the conveyance of ourſelves and part of our effects. We were obliged to leave the greater part at Natchikin, on account of the impoſſibility of loading theſe floats with the whole, and there were no means of increaſing them. We had already collected all the canoes that were in the village, and even ſome of our ten had been brought from the oſtrog of Apatchin, to which we were going.

133 The 17, at break of day, we embarked
137 upon theſe floats. Four Kamtſchadales, by means of long poles, conducted our rafts.

But

133 But they were frequently obliged to place
137 themſelves in the water, in order to haul them along; the depth of the river in ſome places being no more than one or two feet,
000 and in others leſs than ſix inches. Preſently one of our floats received an injury; it was preciſely that which was freighted with our baggage, and we were obliged to unlade every thing upon the bank, in order to refit it. We waited not, but preferred leaving it behind, in order to proceed on our route. At noon another accident, much more deplorable for men whoſe appetites began to be clamorous, occaſioned us a further delay. The float in which our cookery was embarked, ſunk all at once before our eyes. It will be ſuppoſed we did not ſee the loſs which threatened us, with indifferenc; we were eager to ſave the wreck of our proviſions; and for fear of a greater misfortune, we wiſely reſolved to dine before we proceeded any farther. Our dinner

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000 ner tended gradually to diſpel our fears, and gave us courage to diſcharge the water which over-loaded our boats, and to re-ſume our voyage. We had not advanced a werſt, before we met two boats coming to our aſſiſtance from Apatchin. We ſent them to the ſuccour of the damaged float, and to ſupply the place of the boats which were unfit for ſervice. As we continued to advance at the head of our embarkations, we at laſt entirely loſt ſight of them; but we met with nothing diſaſtrous till the evening.

133 I obſerved that the Bolchaia-reka, in the
137 windings which it continually made, ran nearly in the direction of eaſt-north-eaſt and weſt-ſouth-weſt. Its current is very rapid; it appeared to me to flow at the rate of five knots an hour; in the mean-time the ſtones and the ſhoals which we met with every inſtant, obſtructed our paſ-

ſage

7:Lesseps T-3 (1787-88)1790 Kamchada

133 ſage to ſuch a degree, as to render the la-
137 bour of our conductors truly painful. They avoided them with aſtoniſhing addreſs, but as we approached nearer the mouth of the river, I obſerved with pleaſure that it became wider and more navigable. I was equally ſurpriſed to ſee it divide into I know not how many branches, which united again, after having watered a variety of little iſlands, of which ſome are covered with wood. The trees are every where very ſmall and very buſhy; we met with a conſiderable number growing here and there in the very river itſelf, which increaſe ſtill farther the difficulty of the navigation, and prove the careleſſneſs, I may ſay the ſloth, of theſe people. It never occurs to them to root out theſe trees, and thus open a more eaſy paſſage.

136 Different ſpecies of water-fowl, ſuch as ducks, plovers, goëlands, divers, and others,

divert

136 divert themſelves in this river, the ſurface of which is ſometimes covered by them; but it is difficult to approach near enough to ſhoot them. Game does not appear to be ſo common. But for the tracks of the bears, and the half-devoured fiſh, which continually preſented themſelves to our view, I ſhould have believed that they had impoſed upon me, or at leaſt that they had exaggerated, in telling me of the multitude of theſe animals with which the country abounds; we could perceive none; but we ſaw a great number of black eagles, and others that had white wings; magpies, ravens, ſome partridges, and an ermine walking by the ſide of the river.

000 Upon the approach of night, M. Kaſloff rightly judged that it would be more prudent to ſtop, than to continue our route, with the apprehenſion of encountering obſtacles ſimilar to what had already impeded our

[Bolchaia-reka--analyst]

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000 our navigation. How were we to ſurmount them? we were unacquainted with the river; and in the obſcurity of the night, the leaſt accident might prove fatal to us. Theſe conſiderations determined us to leave our boats, and to paſs the night on the right-hand bank of the river, at the entrance of a wood, and near the place where captain King and his party halted *. A good fire warmed and dried our whole company. M. Kaſloff had taken the precaution to place in his float the accoutrements of a tent; and while we were pitching it, which was done in a moment, we had the ſatisfaction to ſee two of our floats arrive, which had not been able to keep up with us. The pleaſure which this reunion afforded us, the fatigue of the day, the convenience of the tent, and our beds, which we had fortunately brought with us, all

* See Cook's Voyage, vol. III. p. 208.

contributed

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contributed to make us paſs a moſt comfortable night.

133 The next day we fitted ourſelves out
361 early and without difficulty. We arrived in four hours at Apatchin, but our floats could not come up as far as the village, on account of the ſhallowneſs of the water. We landed about four hundred yards from the oſtrog, and atchieved this ſhort diſtance on foot.

This village did not appear to me ſo conſiderable as the preceding ones, that is, it contained perhaps three or four habitations leſs. It is ſituated in a ſmall plain, watered by a branch of the Bolchaïa-reka; and on the ſide oppoſite to the oſtrog is an extent of wood, which I conceived might be an iſland formed by the different branches of this river.

361 I learned by the way, that the oſtrog of Apatchin, as well as that of Natchikin, had not been always where they are at preſent. It is within a few years only that the inhabitants, attracted without doubt by the ſituation, or the hope of better and more commodious fiſhing, removed their houſes to this place. The diſtance of the new oſtrog from the former one is, as I was told, about four or five werſts.

133 Apatchin afforded nothing intereſting. I left it to join our floats, which had paſſed the ſhallows, and were waiting for us three werſts from the oſtrog, at the ſpot where the branch of Bolchaïa-reka, after having made a circuit round the village, returns again to its channel. The farther we advanced, the deeper and more rapid we found it; ſo that nothing impeded our courſe the whole way to Bolcheretſk, where we arrived at ſeven o'clock in the evening,

accom-

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000 which appeared to him to be neceſſary; but not ſatisfied with this, he would go himſelf to ſee them carried into execution. He invited me to accompany him, which I accepted with cheerfulneſs, promiſing myſelf much pleaſure from having an opportunity of viewing the mouth of the Bolchaïa-reka, and the harbour which is formed by it.

We ſet off at eleven o'clock in the morning, upon two floats, of which one, that which carried us, was formed of three canoes. Our conductors made uſe of oars and ſometimes of their poles, which frequently in difficult and ſhallow paſſages, enabled them to reſiſt the impetuoſity of the current, by keeping back the float, which would otherwiſe have been carried along with rapidity and infallibly overturned.

The Biſtraïa, another very rapid river,

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The Biferaïa, another very rapid river
133 and larger than the Bolchaïa-reka, joins it
361 to the weſt, about the diſtance of half a werſt from Bolcheretſk. It loſes its name at the conflux, and takes that of the Bolchaïa-reka, which is rendered very conſiderable by this addition, and empties itſelf into the ſea at the diſtance of thirty werſts.

We landed at ſeven o'clock in the evening at a little hamlet called *Tchekafki*. Two iſbas, two balagans, and a yourt almoſt in ruins, were all the habitations I could perceive. There was alſo a wretched warehouſe, made of wood, to which they give the name of magazine, becauſe it belongs to the crown, and firſt receives the ſupplies with which the galliots from Okotſk* are freighted. The hamlet was built as a guard to this magazine. We paſſed the

* When theſe galliots are obliged to winter here, they harbour in the mouth of a narrow and deep river, which pours itſelf into the Bolchaïa-reka, about fifty yards from the hamlet, higher up.

night

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000 night in one of the iſbas, reſolving to repair early in the morning to the wreck.

At break of day we embarked upon our floats. It was low water; we coaſted along a dry and very extenſive ſand bank, at the left of the Bolchaïa-reka, as we advanced towards the ſea, and which leaves to the north a paſſage of only eight or ten fathoms wide, and two and a half deep. The wind, which blew freſh from the north-weſt, ſuddenly agitated the river, and we dared not riſk ourſelves in the channel. Our boats alſo were ſo ſmall, that a ſingle wave half filled them; two men were conſtantly employed in throwing out the water, and were ſcarcely able to effect it. We advanced therefore as far as we could along this bank.

At length we perceived the maſt of the galliot above a neck of low land that ex-

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000 tended to the ſouth. It appeared to be about two werſts from us, ſouth of the entrance of the Bolchaïa-reka. At the point of land juſt mentioned, we diſcovered the light houſe, and the cot of the perſons appointed to guard the wreck: unfortunately we could only ſee all this at a diſtance. The direction of the river, from the place where it empties itſelf into the ſea, appeared to me to be north-weſt, and its opening to be
133 half a werſt wide. The light-houſe is on
361 the left coaſt, and on the right is the continuation of the low land, which the ſea overflows in tempeſtuous weather, and which extends almoſt as far as the hamlet of Tchekafki. The diſtance of the hamlet from the mouth of the river is from ſix to eight werſts. The nearer we approach the entrance, the more rapid is the current.

It was not poſſible to purſue our voyage; the wind became ſtronger, and the waves increaſed

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000 increaſed every moment. It would have been the height of imprudence to quit the ſand bank, and croſs, in ſuch foul weather and ſuch feeble boats, two werſts of deep water, which is the width of the bay formed by the mouth of the river. The governor, who had already met with ſome proofs of my little knowledge of navigation, was very anxious however to conſult me upon this occaſion. My advice was to tack about, and return to the hamlet where we had ſlept; which was executed immediately. We had great reaſon to be pleaſed with our prudence; ſcarcely were we arrived at Tchekafki when the weather became terrible.

133 I conſoled myſelf with the idea, that I had at leaſt obtained my end, which was to ſee the entrance of the Bolchaïa-reka. I can aſſert with confidence, that the acceſs to it is very dangerous, and impracticable

to

133 to ſhips of a hundred and fifty tons burthen. The Ruſſian veſſels are too frequently ſhipwrecked, not to open the eyes both of navigators who may be tempted to viſit this coaſt, and of the nations who may think of ſending them.

The port, beſides, affords no ſhelter. The low lands with which it is ſurrounded, are no protection againſt the winds which blow from every quarter. The banks alſo which the current of the river forms, are very variable, and of courſe it is almoſt impoſſible to know with certainty the channel, which muſt neceſſarily, from time to time, change it direction as well as its depth.

We paſſed the reſt of the day at Tchekafki, being unable to proceed to the ſhipwrecked veſſel, or to return to Bolcheretſk. The ſky, inſtead of clearing up, became covered on all ſides with ſtill blacker and thicker

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000 thicker clouds. Soon after our arrival, a dreadful tempeſt aroſe, and the Bolchaïareka became agitated to an extreme violence, even ſo high up as our hamlet. Its billows ſurpriſed me, becauſe of the little extent and depth of the river in this place. The point north-eaſt of its mouth, and the low land, which this gale of wind extended, formed but one breaker, over which the waves rolled with a horrible noiſe. The gale was not likely to abate, but I was on ſhore, and thought myſelf able to brave it. I took it into my head therefore, to go a hunting in the environs of the hamlet. I had ſcarcely advanced a few ſteps, when the wind ſeized me, and I felt myſelf ſtagger; my courage however did not fail me, and I perſevered; but coming to a ſtream, which it was neceſſary to croſs in a boat, I ran the moſt imminent riſk, and returned immediately, well puniſhed for my petty preſumption. Theſe dreadful hurricanes being

very

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000very common at this ſeaſon, it is not be wondered at that ſhipwrecks are ſo frequent on theſe coaſts: the veſſels are ſo ſmall as to have but one maſt; and, what is ſtill worſe, the ſailors who manage them, if report may be credited, have too little ſkill to be confided in.

The next day we rèſumed our journey, and arrived at Bolcheretſk in the duſk of the evening.

As I forſee that my ſtay here will probably be long, from the neceſſity of waiting till ſledges can be uſed, I ſhall proceed with my deſcriptions, and the recital of what I have ſeen myſelf, or learned from my converſations with the Ruſſians and
361 Kamtſchadales. I ſhall begin with the
563 town, or fort of Bolcheretſk, for ſo it is called, in Ruſſia (*oſtrog*, or *krepoſt*).

It is ſituated on the border of the Bolcha-

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361 chaïa-reka, in a ſmall iſland formed by dif-
563 ferent branches of this river, which divide the town into three parts more or leſs inhabited. The moſt diſtant diviſion, and which is fartheſt to the eaſt, is a kind of ſuburb called *Paranchine*; it contains ten or twelve iſbas. South eaſt of Paranchine, is the middle diviſion, where there is alſo a number iſbas, and among others, a row of wooden huts that ſerve for ſhops. Oppoſite to theſe is the guard-houſe, which is alſo the chancery, or court of juſtice*; this houſe is larger than the reſt, and is always guarded by a centinel. A ſecond branch of the Bolchaïa-reka again ſeparates, by a very narrow ſtream, this group of habitations, built without order, and ſcattered here and there, from another at the north-weſt, nearer the river. The river in this part flows in the

* This guard-houſe is likewiſe uſed as a priſon, and even as a ſchool for children. The maſter of the ſchool is a Japaneſe; he is ſkilled in many languages, and is paid by government for inſtructing the children of this country.

direction

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361 direction of ſouth-eaſt and north-weſt, and
563 paſſes within fifty yards of the governor's houſe. This houſe is eaſily diſtinguiſhed from the reſt; it is higher, larger, and is built like the wooden houſes of St. Peterſburg. Two hundred yards north-eaſt of this houſe, is the church; the conſtruction of which is ſimple, and like that of the village churches in Ruſſia. By the ſide of it is an erection of timber work, twenty feet high, covered only with a roof, under which three bells are ſuſpended. North-weſt of the governor's houſe, and ſeparated from it by a meadow or marſh about three hundred yards wide, is another group of dwellings, conſiſting of twenty-five or thirty iſbas, and ſome balagans. There are in general very few of theſe latter habitations at Bolcheretſk; the whole do not exceed ten; the iſbas and wooden houſes, without including the eight ſhops, the chancery, and the governor's houſe, amount to fifty or ſixty.

From

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From this minute deſcription of the fort of Bolcheretſk, it muſt appear ſtrange that it retains ſo inapplicable a name; for I can affirm, that no traces are to be found of fortifications, nor does it appear that there has ever been an intention of erecting any. The ſtate and ſituation, both of the town and its port, induce me to believe, that government have felt the innumerable dangers and obſtacles they would have to ſurmount, if they were to attempt to render it more flouriſhing, and make it the general depôt of commerce to the peninſula. Their views, as I have already obſerved, ſeem rather turned to the port of Saint Peter and Saint Paul, which for its proximity, ſafety, and eaſy acceſs, merits the preference.

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There is a degree of civilization at Bolcheretſk, which I did not perceive at Petropavlofska. This ſenſible approach to European manners, occaſions a ſtriking differ-

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563 rence between the two places. I ſhall endeavour to point out and account for this as I proceed in my obſervations upon the inhabitants of theſe oſtrogs; for my principal object ſhould be, to give details of their employments, their cuſtoms, their taſtes, their diverſions, their food, their underſtandings, their character, their conſtitutions, and laſtly, the principles of government to which they are ſubjected.

The population of Bolcheretſk, including men, women and children, amounts to between two and three hundred. Among theſe inhabitants, reckoning the petty officers, there are ſixty or ſeventy Coſſacs, or ſoldiers, who are employed in all labours that relate to the ſervice of government*. Each in his turn mounts guard; they clear the ways; repair the bridges; unlade the

* Their pay is ſo inconſiderable, that the receipt of a whole year would not ſuffice to maintain them for a ſingle month, if they had not the reſource of a petty fraudulent commerce, of which I ſhall preſently give an account.

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563 provifions fent from Okotfk, and convey them from the mouth of the Bolchaïa-reka to Bolcheretfk. The reft of the inhabitants are compofed of merchants and failors.

563 437 273 Thefe people, Ruffians and Coffacs, together with a mixed breed found among them, carry on a clandeftine commerce, fometimes in one article, and fometimes in another; it varies as often as they fee any reafon for changing it; but it is never with a view of enriching themfelves by honeft means. Their induftry is a continual knavifhnefs; it is folely employed in cheating the poor Kamtfchadales, whofe credulity and infuperable propenfity to drunkennefs, leave them entirely at the mercy of thefe dangerous plunderers. Like our mountebanks, and other knaves of this kind, they go from village to village to inveigle the too filly natives: they propofe to fell them brandy, which they artfully prefent to them

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563 to taſte. It is almoſt impoſſible for a Kamt-
437 ſchadale, male or female, to refuſe this offer.
273 The firſt eſſay is followed by many others; preſently their heads become affected, they are intoxicated, and the craft of the tempters ſucceed. No ſooner are they arrived to a ſtate of inebriety, than theſe pilferers know how to obtain from them the barter of their moſt valuable effects, that is, their whole ſtock of furs, frequently the fruit of the labour of a whole ſeaſon, which was to enable them to pay their tribute to the crown, and procure perhaps ſubſiſtance for a whole family. But no conſideration can ſtop a Kamtſchadale drunkard; every thing is forgotten, every thing is ſacrificed to the gratification of his appetite, and the momentary pleaſure of ſwallowing a few glaſſes of brandy*, reduces

* This is well known to be the ruling paſſion of all the people of the north; but I have had more than one occaſion to obſerve, that the Kamtſchadales are inferior in this reſpect

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437 duces him to the utmoſt wretchedneſs.
273 Nor is it poſſible for the moſt painful expe-
563 rience to put them on their guard againſt their own weakneſs, or the cunning perfidy of theſe traders, who in their turn drink,

reſpect to none of them. The following ſtory, among others, was told me, that I might be able to judge of the rapacity of theſe vagabond traders, and the ſtupid prodigality of their dupes.

A Kamtſchadale had given a ſable for a glaſs of brandy. Inflamed with a deſire of drinking another, he invited the ſeller into his houſe. The merchant thanked him, but ſaid he was in a hurry. The Kamtſchadale renewed his ſolicitations, and propoſed a ſecond bargain: he prevailed.—" Come, another glaſs for this ſable, it is a finer " one than the firſt.—No; I muſt keep the reſt of my " brandy; I have promiſed to ſell it at ſuch a place, and I " muſt be gone.—Stay a moment; here are two ſables.— " Tis all in vain.—Well, come, I will add another.— " Agreed, drink." Meanwhile the three ſables are ſeized, and the hypocrite makes a freſh pretence to come away: his hoſt redoubles his importunities to retain him, and demands a third glaſs: further refuſals and further offers: the higher the chapman raiſes his price, the more the Kamtſchadale is prodigal of his furs. Who would have ſuppoſed that it would have ended in the ſacrifice of ſeven moſt beautiful ſables for this laſt glaſs! they were all he had.

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273 in like manner, all the profits of their
437 knavery.

273 I ſhall terminate the article of commerce
435 by adding, that the perſons who deal moſt
439 in wholeſale, are merely agents of the merchants of Totma, Vologda, Grand Uſtiug, and different towns of Siberia, or the factors of other opulent traders, who extend even to this diſtant country their commercial ſpeculations.

All the wares and proviſions, which neceſſity obliges them to purchaſe from the magazines, are ſold exceſſively dear, and at about ten times the current price at Moſcow. A *vedro** of French brandy coſts eighty roubles†. The merchants are al-

* A Ruſſian meaſure containing from fifteen to twenty quarts.

† Eighteen pounds ſterling, eſtimating the rouble at four ſhillings and ſixpence.

lowed

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273 lowed to traffic in this article; but the
435 brandy, diſtilled from corn, which is brought
439 from Okotſk, and that produced by the
177 country, which is diſtilled from the *ſlat-kaïa-trava*, or ſweet herb, are ſold, upon government account, at forty one roubles ninety-ſix kopecks* the vedro. They can be ſold only in the *kabacs*, or public houſes, opened for that purpoſe. At Okotſk, the price of brandy diſtilled from corn is no more than eighteen roubles the vedro; ſo that the expence of freight is charged at twenty-three roubles ninety-ſix kopecks, which appears exorbitant, and enables us to form ſome judgment of the accruing profit.

The reſt of the merchandize conſiſts of nankins and other China ſtuffs, together with various commodities of Ruſſian and foreign manufacture, as ribands, handker-

* Nine pounds nine ſhillings.

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439 chiefs, ſtockings, caps, ſhoes, boots, and
177 other articles of European dreſs, which may be regarded as luxuries, compared with the extreme ſimplicity of apparel of the Kamtſchadales. Among the proviſion imported, there are ſugar, tea, a ſmall quantity of coffee, ſome wine, but very little, biſcuits, confections, or dried fruits, as prunes, raiſins, &c. and laſtly, candles, both wax and tallow, powder, ſhot, &c.

The ſcarcity of all theſe articles in ſo diſtant a country, and the need, whether natural or artificial, which there is for them, enable the merchants to ſell them at whatever exorbitant price their voracity may affix. In common, they are diſpoſed of almoſt immediately upon their arrival. The merchants keep ſhops, each of them occupying one of the huts oppoſite the guard-houſe; theſe ſhops are open every day, except feaſt days.

The

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177 The inhabitants of Bolcheretſk differ not
291 from the Kamtſcadales in their mode of
563 living; they are leſs ſatisfied, however, with balagans, and their houſes are a little cleaner.

Their clothing is the ſame. The outer garment, which is called *parque*, is like a waggoner's frock, and is made of the ſkins of deer, or other animals, tanned on one ſide. They wear under this long breeches of ſimilar leather, and next the ſkin a very ſhort and tight ſhirt, either of nankin or cotton ſtuff; the women's are of ſilk, which is a luxury among them. Both ſexes wear boots; in ſummer, of goats or dogs ſkins tanned; and in winter, of the ſkins of ſea wolves, or the legs of rein deer*. The men conſtantly wear fur caps; in the mild ſeaſon they put on longer ſhirts of nankin,

439 *) Articles of apparel made of the ſkins of rein deer are procured from the Koriacs.

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177 or of ſkin without hair; they are made like
291 the parque, and anſwer the ſame purpoſe,
563 that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 The principal food of theſe people con-
462 ſiſts, as I have already obſerved, in dried
222 fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamtſchadales

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ſchadales and Ruſſians of this country. When the women go out to make theſe harveſts for winter conſumption, it is high holyday with them, and the anniverſary is celebrated by a riotous and intemperate joy, that frequently gives riſe to the moſt extravagant and indecent ſcenes. They diſperſe in crouds through the country, ſinging and giving themſelves up to all the abſurdities which their imagination ſuggeſts; no conſideration of fear or modeſty reſtrains them. I cannot better deſcribe their licentious frenzy than by comparing it with the bacchanals of the Pagans. Ill betide the man whom chance conducts and delivers into their hands! however reſolute or however active he may be, it is impoſſible to evade the fate that awaits him; and it is ſeldom that he eſcapes, without receiving a ſevere flagellation.

Their proviſions are prepared nearly in the

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THEIR PROVISIONS ARE PREPARED NEARLY IN
252 the following manner; it will appear, from
262 the recital, that they cannot be accuſed of much delicacy. They are particularly careful to waſte no part of the fiſh. As ſoon as it is caught they tear out the gills, which they immediately ſuck with extreme gratification. By another refinement of ſenſuality or gluttony, they cut off alſo at the ſame time ſome ſlices of the fiſh, which they devour with equal avidity, covered as they are with clots of blood. The fiſh is then gutted, and the entrails reſerved for their dogs. The reſt is prepared and dried; when they eat it either boiled, roaſted, or broiled, but moſt commonly raw.

The food which the epicures eſteem moſt, and which appeared to me to be ſingularly diſguſting, is a ſpecies of ſalmon, called *tchaouitcha*. As ſoon as it is caught, they bury it in a hole; and in this kind of larder they leave it till it has had time to ſour, or, properly

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252 properly ſpeaking, become perfectly pu-
262 trified. It is only in this ſtate of corruption that it attains the flavour moſt pleaſing to the delicate palates of theſe people. In my opinion the infectious odour that exhales from this fiſh, would ſuffice to repulſe the moſt hungry being; and yet a Kamtſchadale feeds voluptuouſly upon this rotten fleſh. How fortunate does he conſider himſelf when the head falls to his lot! this is deemed the moſt delicious morſel, and is commonly diſtributed into many parts. I frequently wiſhed to overcome my averſion, and taſte this ſo highly valued food; but my reſolution was unequal to it; and I was not only unable to taſte it, but even to bring it near my mouth; every time I attempted, the fetid exhalation which it emitted gave me a nauſea, and diſguſted me inſuperably.

262 The moſt common fiſh in Kamtſchatka
372 are trouts, and ſalmon of different ſpecies;

ſea

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262 ſea wolves are alſo eaten; the fat of this fiſh
372 is very wholeſome, and ſerves them beſide for lamp oil.

136 Among the vegetables which are made
252 uſe of by the Kamtſchadales, the principal
262 are *ſarana* root, wild garlic, *ſlatkaïa-trava*, or ſweet herb, and other plants and fruits nearly ſimilar to what are found in Ruſſia.

The *ſarana* is known to botaniſts*. Its ſhape, its ſize, and its colour have been deſcribed at large in the third voyage of captain Cook. Its farinaceous root ſerves inſtead of bread†. It is dried before it is

* By the name of *lilium flore atro rubente.*

† The Coſſacs uſe rye alſo, which makes a ſort of black bread, like that of the Ruſſian peaſants. Government allows them a certain quantity of rye flour, but it is inſufficient, and they are obliged to procure more at their own expence. Some of them lay it up in ſtore in order to profit by its future ſale.

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136 uſed; but it is wholeſome and nouriſhing
252 in whatever mode it may be prepared.
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From the wild garlic* they make a harſh and fermented beverage, which has a very unpleaſant taſte; it is alſo uſed in various ſauces; the Kamtſchadales are very fond of it.

The ſlatkaïa-trava, or ſweet herb, is pleaſant enough when it is freſh. This plant† has alſo been minutely deſcribed by the Engliſh. It is highly eſteemed by the natives, particularly the ſpirit diſtilled from it. Soon after it is gathered, they ſlit it in two, and ſcrape out the pith with a muſcle-ſhell: they then dry it for winter, and

* It is called in Kamtſchatka, *tſcheremſcha*. Gmelin denominates it: *allium foliis radicalibus petiolatis, floribus umbellatis*. Vol. 1. p. 49.

† *Spondilium foliolis pinnatifidis*. See Linn. The juice of the rind of this plant is ſo acrid, that it is impoſſible to touch it without bliſtering the hand. In gathering it they take care to wear gloves.

when

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252 when they uſe it in their ragouts, it is pre-
439 viouſly boiled. Brandy is alſo diſtilled from
273 this ſweet herb, which, as I obſerved before, is ſold on account of government: for this purpoſe the plant is purchaſed of the Kamtſchadales*.

162 There are three ſorts of inhabitants, the
563 natives or Kamtſchadales, the Ruſſians and Coſſacs, and the deſcendants from intermarriages.

The indigenes, that is, thoſe whoſe blood is unmixed, are few in number; the ſmall pox has carried off three fourths of them, and the few that are left are diſperſed through the different oſtrogs of the peninſula; in Bolcheretſk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is ſure to be extremely agitated during the night, and to feel the next day as melancholy and reſtleſs as if he had committed ſome crime.

The

142 The true Kamtſchadales are in general below the common height; their ſhape is round and ſquat, their eyes ſmall and ſunk, their cheeks prominent, their noſe flat, their hair black, they have ſcarcely any beard, and their complexion is a little tawny. The complexion and features of the women are very nearly the ſame; from this repreſentation, it will be ſuppoſed they are not very ſeducing objects.

157 578 476 The character of the Kamtſchadales is mild and hoſpitable; they are neither knaves, nor robbers; they have indeed ſo little penetration, that nothing is more eaſy than to deceive them, as we have ſeen in the advantage that is taken of their propenſity to intoxication. They live together in the utmoſt harmony, and the more ſo, it would ſeem, on account of the ſmallneſs of their number. This unanimity diſpoſes them to aſſiſt one another in their labours,

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476 bours, which is no ſmall proof of their zeal
157 to oblige, if we conſider the natural and ex-
461 treme ſlothfulneſs of their diſpoſition. An
515 active life would be inſupportable to them; and the greateſt happineſs, in their eſtimation, next to that of getting drunk, is to have nothing to do, and to live for ever in tranquil indolence. This is carried ſo far with theſe people, as frequently to make them neglect the means of providing the indiſpenſable neceſſaries of life; and whole families are often reduced to all the ſeverities of famine, becauſe they would not take the pains of providing in ſummer a reſerve of fiſh, without which they are unable to live. If they neglect in this manner the preſervation of their exiſtence, it is not to be ſuppoſed that they are more attentive to the article of cleanlineſs; it diſplays itſelf neither in their perſons, nor their habitations; and they may juſtly be reproached for being addicted to the contrary

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515 trary extreme. Notwithſtanding this care-
157 leſſneſs, and other natural defects, it muſt be regretted that their number is not more conſiderable; as, from what I have ſeen, and what has been confirmed to me by different perſons, if we would be ſure of finding ſentiments of honour and humanity in this country, it is neceſſary to ſeek for them among the true Kamtſchadales; they have not yet bartered their rude virtues for the poliſhed vices of the Europeans ſent to civilize them.

177 It was at Bolcheretſk that I began to per-
563 ceive the effects of their influence. I ſaw the trace of European manners, leſs in the mixture of blood, in the conformation of features, and the idiom of the inhabitants, than in their inclinations and mode of life, which did not always diſcover any very conſiderable fund of virtue. This ſtriking difference between the inhabitants and

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177 the indigenes, ſprings, in my opinion, from
563 the difficulties which lie in the road to civilization, and I will aſſign my reaſons.

Bolcheretſk, not long ago, was the chief place of Kamtſchatka, particularly as the governors had thought proper to eſtabliſh their reſidence there. The chiefs and their ſuites introduced European knowledge and manners: theſe, it is known, generally become adulterated in tranſmiſſion, according to the diſtance from the ſource. Meanwhile it is to be preſumed that the Ruſſian government was careful, as far as it was poſſible, to confide its authority and the execution of its orders, only to officers of acknowledged merit, if I may judge from thoſe who are at preſent employed; and it is therefore to be ſuppoſed that theſe officers, in the places of their reſidence, were ſo many examples of the virtues, the acquirements, and all the eſtimable qualities of

civilized

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177
563

civilized nations. But unfortunately the leſſons which thy gave, were not always ſo efficacious as might have been expected; either becauſe being only ſketches, they were not ſufficiently felt, or rather, not being imbibed in all their purity, they made but momentary or perhaps vicious impreſſions on the mind.

Theſe reformers found not the ſame zeal either in the Coſſacs who compoſed the garriſon, or in the merchants and other Ruſſian emigrants who ſettled in the peninſula. The diſpoſition to licencioufneſs, and the deſire of gain, which the firſt conquerors of a country almoſt always bring with them, and the continual development of theſe qualities, by the facility with which the natives may be duped, contributed to check the progeſs of reform. The fatal infection was ſtill more diffuſely ſpread by intermarriages, while the ſeed of the ſocial

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177 virtues, which had been attempted to be
563 ſown, ſcarcely found a reception.

The conſequence has been, that the natives, or true Kamtſchadales, have preſerved almoſt univerſally their ignorant ſimplicity and uncultivated manners; and that a part of the reſt of the inhabitants, Ruſſians and mixed breed, who have ſettled themſelves in the oſtrogs where the governors reſide, ſtill retain indeed a faint ſhade of European manners, but not of ſuch as are moſt pure. We have already had a proof of this in what has been ſaid of their commercial principles, and my conviction has been rendered ſtronger during my abode at Bolcheretſk, by a cloſer ſtudy of the inhabitants, who, this faint ſhade excepted, differ little from the indigenes.

157 M. Kaſloff, and thoſe who accompanied
563 him, in imitation of his example, frequently
177 give

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157 give entertainments or balls to the ladies of
563 this oſtrog, who accept ſuch invitations with
177 equal alacrity and joy. I had an opportunity of ſeeing that what I had been told was true; that theſe women, the Kamtſchadales as well as the Ruſſians, have a ſtrong propenſity to pleaſure; their eagerneſs indeed is ſo great, that they are unable to conceal it. The precoſity of the girls is aſtoniſhing, and ſeems not at all to be affected by the coldneſs of the climate.

177 With reſpect to the women of Bolche-
563 retſk, who were preſent at theſe aſſemblies, and who were chiefly either of mixed blood or of Ruſſian parents, their figures in general did not appear diſagreeable, and I perceived ſome who might be conſidered as handſome: but the freſhneſs of youth is not of long duration; from child-bearing, or the painful labours to which they are ſubjected, it fades away almoſt in the flower

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177 of their age. Their difpofition is extremely
563 cheerful; a little, perhaps, at the expence of decency. They endeavour to amufe the company by every thing which their gaiety and playfulnefs can furnifh. They are fond of finging, and their voice is pleafant and agreeable; it is only to be wifhed that their mufic had lefs refemblance to their foil, and approached nearer to our own. They fpeak both the Ruffian and Kamtfchadale languages, but they all preferve the accent of the latter idiom. I little expected to fee in this part of the world Polifh dances, and ftill lefs country dances in the Englifh tafte; but what was my furprife to find that they had even an idea of a minuet! Whether my abode for twenty fix months upon the fea, had rendered me lefs faftidious, or that the recollections they revived facinated my eyes, thefe dances appeared to be executed with tolerable precifion, and more grace than I could have imagined.

The

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177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
152 five. I ſhall finiſh this account with a re-
837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

533 The entertainments and aſſemblies of the
535 native Kamtſchadales, at which I was alſo

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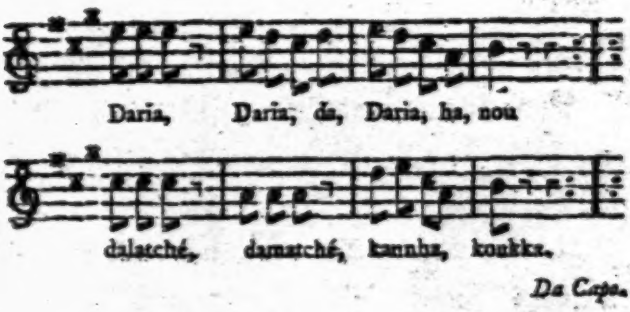
533 present, offered a spectacle equally enti-
535 tled to notice for its singularity. I know not which struck me most, the song or the dance. The dance appeared to me to be that of savages. It consisted in making regular movements, or rather unpleasant and difficult distortions, and in uttering at the same time a forced and gutteral sound, like a continued hiccough, to mark the time of the air sung by the assembly, the words of which are frequently void of sense, even in Kamtschadale. I noted down one of these airs, which I shall insert in this place, in order to give an idea of their music and metre.



The

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533 The words mean,

Daria *, Daria ſings and dances ſtill.

This air is repeated without ceaſing.

535 In their dances they are fond of imitat-
825 ing the different animals they purſue, ſuch as the partridge and others, but principally the bear. They repreſent its ſluggiſh and ſtupid gait, its different feelings and ſituations; as the young ones about their dam; the amourous ſports of the male with the female; and laſtly, its agitation when purſued. They muſt have a perfect knowledge of this animal, and have made it their particular ſtudy, for they repreſent all its motions as exactly, I believe, as it is poſſible. I aſked the Ruſſians, who were greater connoiſſeurs than myſelf, having been oftener preſent at the taking of theſe animals,

* Daria is a female Ruſſian name.

whether

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535 whether their pantomime ballets were well
825 executed; and they assured me that the dancers were the best in the country, and that the cries, gait, and various attitudes of the bear, were as accurate as life. Meanwhile, without offence to the amateurs, these dances are, in my opinion, not less fatiguing to the spectators than to the performers. It is a real pain to see them distort their hips, dislocate every limb, and wear out their lungs; to express the excess of pleasure which they take in these strange balls, which, I repeat it, resemble the absurd diversions of savages: the Kamtschadales may indeed, in many respects, be considered as of that rank.

224 Having given an account of the address with which these people counterfeit the postures and motions of the bear, who may be called their dancing master, it may not be unpleasing to relate in what manner they hunt

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224 hunt this animal. There are various modes of attacking it; ſometimes they lay ſnares for it: under a heavy trap, ſupported in the air by a ſcaffolding ſufficiently high, they place ſome kind of bait to attract the bear, and which he no ſooner ſmells and perceives, than he eagerly advances to devour; at the ſame time he ſhakes the feeble ſupport of the trap, which falls upon his neck, and puniſhes his voracioufneſs by cruſhing his head, and frequently his whole body. In paſſing the woods I have ſeen them caught in this way; the trap is kept baited till it ſucceeds, which ſometimes does not happen for almoſt a year. This method of taking them requires no great boldneſs, or fatigue; but there is another mode, very much adopted in this country, to which equal ſtrength and cou-
224 rage are neceſſary. A Kamtſchadale goes
411 out, either alone or in company, to find a bear. He has no other arms than his gun, a kind

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224 a kind of carabine whose but-end is very
411 small; a lance or spear; and his knife. His stock of provision is made up in a bundle containing about twenty fish. Thus lightly equipped, he penetrates into the thickest part of the woods, and every place that is likely to be the haunt of this annimal. It is commonly in the briars, or among the rushes on the borders of lakes and rivers, that the Kamtschadale posts himself, and waits the approach of his adversary with patience and intrepidity; if it be necessary, he will remain thus in ambuscade for a whole week together, till the bear makes his appearance. The moment it comes within his reach, he fixes in the ground a forked stick* belonging to his gun, by means of which he takes a truer aim, and shoots with

* The Kamtschadales are unable to shoot without this means of resting their gun, which, from the time required to prepare it, is evidently inconsistent with the celerity of this instrument, its chief advantage to a sportsman.

more

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224 more certainty. It is ſeldom that, with
411 the ſmalleſt ball, he does not ſtrike the bear either in the head, or near the ſhoulder, which is the tendereſt part. But he is obliged to charge again inſtantly, becauſe the bear, if the firſt ſhot has not diſabled him, runs* at the hunter, who has not always time for a ſecond ſhot. He has then recourſe to his lance, with which he quickly arms himſelf to contend with the beaſt, who
224 attacks him in his turn. His life is in dan-
825 ger† if he does not give the bear a mortal thruſt; and in ſuch combats, it may be ſup-

* It is common enough alſo for it to take to flight, notwithſtanding its wound, and conceal itſelf in thickets or ruſhes, where it is traced by means of its blood, and found either dead or expiring.

† I was aſſured that when a bear triumphs over his aggreſſor, he tears the ſkin from the ſkull, draws it over his face, and then leaves him; a mode of revenge which implies, according to the Kamtſchadales, that this animal cannot bear the human aſpect; and this ſtrange prejudice ſupports them in the opinion of their ſuperiority, and ſeems to inſpire them with additional courage.

poſed

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761 posed the man is not always the conqueror;
224 but this does not prevent the inhabitants of this country from daily exposing their lives; the frequent examples of the death of their countrymen has no effect upon them: indeed they never go out, without considering before hand that it is either to conquer or to die; and this severe alternatiue neither stops nor terrifies them*.

224 They hunt other animals nearly in the same manner, such as rein deer, argali, or wild sheep, called in Russia *diki-barani*,

* They hunt the bear in this manner in every season of the year, except when the country is covered with snow; their method is then different. It is known that in winter the bear retreats to the den which he has fabricated during summer of the branches of trees; he continues there while the frost lasts, either asleep, or licking his paws. The Kamtschadales pursue him in their sledges, and attack him with their dogs, who oblige him to defend himself: he rushes from his lurking place to certain death; if he refuse to come out, his fate is equally certain, and he is crushed to death under the ruins of his den.

foxes,

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224 foxes, otters, beavers, ſables, hares*, &c.
261 but they have not the ſame dangers to encounter; ſometimes they make uſe of ſnares, conſtructed of wood or iron, leſs than thoſe which are ſet for bears, and reſembling in their ſimplicity our pitfalls; no other attention is neceſſary than that of viſiting them from time to time. The Kamtſchadales ſometimes lie in ambuſh, armed in the manner I have deſcribed; and the only hardſhip they experience reſults from their proviſion being exhauſted in conſequence of the long duration of their chace. They frequently ſubmit to ſuffer hunger for many days together, rather than quit their ſtations till they have obtained the end of their purſuit; but they amply repay themſelves for this faſting, by immediately devouring the fleſh of the animals †, and by the plea-

* Theſe animals are all deſcribed in Cook's voyage.

262 † The fleſh of bears, argali, and rain-deer, is conſidered by them as very wholeſome, the laſt particularly; I frequently feaſted upon it.

ſure

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224 ſure with which they count over the ſkins they obtain from them.

136 They chuſe for their chace the ſeaſons
·224 when the fur of the animal is in its greateſt perfection. Sables are hunted in the beginning of winter. Theſe animals live commonly in trees, and are called after their name; a part of the fur neareſt the ſkin being of the ſame colour as thoſe which they moſt frequent, as the birch, the fir, &c.

The moſt favourable ſeaſons for hunting foxes are autumn, winter, and ſpring. There are four different ſpecies. 1. The whitiſh red fox, which is leaſt eſteemed. 2. The red or bright red fox. 3. The fox called *ſévadouſchka*, the colour of which is a mixture of red, black, and grey. 4. The black fox, which is the ſcarceſt and moſt valuable: it is really of a deep and entire black, except that at the extremity of the fur upon the

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136 the back, which is the longeſt; a grey tint
224 is ſometimes perceptible. Some of this ſpecies are ſingularly valuable. There are two other ſpecies of the fox that may be added to theſe, though they are not regarded as ſuch in this country, the blue fox and the white fox. They are called in Ruſſia *galouboy peſſets*, and *beloy peſſets*; their fur is thicker than that of the reſt of the ſpecies. The foxes of the continent are in general more beautiful than thoſe caught in the different iſlands of the eaſt*, and produce an infinitely higher price.

Rein-deer are hunted in winter, and argali in autumn. Otters are extremely ſcarce in this country; but there is a great abundance of ermines, though, I know not for what reaſon, no pains are taken to catch

* The Aleutienne iſlands, Schoumagine iſlands, Fox iſlands, &c.

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224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 * Their nets are made of pack thread, like ours; they
314 purchaſe it of the Ruſſians: there is another kind however,
439 which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

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226 by closing up the river with stakes and branches of trees, so as to leave only a narrow passage for the fish, or sometimes several, where they place baskets, so constructed that, if the fish once enter, it is impossible for them to retreat.

231 Horses are very scarce in Kamtschatka.
492 I saw some at Bolcheretsk belonging to government, and intrusted to the care of the Cossacs. They merely serve during summer for the carriage of merchandize and other effects of the crown, and for the convenience of travellers.

Dogs however abound in this country, and are so serviceable to the Kamtschadales as to render the privation of the other domestic animals less felt by them. They serve all the purposes of carriage, and are fed without difficulty or expence, their food consisting entirely of the offals, or such decayed

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231 fish as are rejected by their maſters; and
492 even theſe are not allowed, unleſs when it is neceſſary. In ſummer, which is their ſeaſon of reſt, little care is taken of them; the dogs well know how to provide for themſelves, by ranging over the country and along the ſides of lakes and rivers; and the punctuality with which they return, is one of the moſt ſtriking proofs of the fidelity of theſe animals. When winter arrives, they dearly pay for the liberty and temporary repoſe they have enjoyed. Their labour and ſlavery begin anew, and theſe dogs muſt have extreme vigour to be able to ſupport them. Ma nwhile they are not remarkably large, and reſemble pretty exactly our mountain dogs, or ſuch as are commonly uſed by ſhepherds. There is not an individual inhabitant, Ruſſian or native, that has leſs than five. They make uſe of them when they travel, when they go to the foreſts to cut wood, and for the conveyance

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231 veyance of their effects and provisions, as
492 well as their persons. In short, these dogs conduct travellers from place to place, and horses could not in reality be more serviceable. They are harnessed to a sledge two and two together*, with a single one before as a leader. This honour is bestowed on the most intelligent, or the best trained dog, and he understands wonderfully the terms used by the conductor to direct his course. The cry of *tagtag*, *tagtag*, turns him to the right, and *kougba*, *kougba*, to the left; the intelligent animal understands it

* They are castrated like horses, but the mode of performing the operation is different. The Kamtschadales do not extirpate the testicles, but bruise them, and the instrument they make use of is their teeth. Some of them do not survive, and others are crippled and unfit for service. In the mean time it is imagined that equal advantage could not be derived from these animals, if they were permitted to remain in their natural state; it would not be practicable to harness them with females. All the males, however, are not mutilated; a sufficient number is reserved for the preservation of the species, and these are frequently used for hunting.

231 immediately, and gives to the reſt the ex-
492 ample of obedience: *ab, ab*, ſtops them, and
493 *ba* makes them ſet off. The number of dogs that it is neceſſary to harneſs, depends upon the load; when it is little more than the weight of the perſon who mounts the ſledge, it is conſidered as a common ſledge, or *ſaunka**, and the team conſiſts of four or five dogs. The harneſs † is made of leather. It paſſes under the neck, that is, upon the breaſt of theſe ſteeds, and is joined to the ſledge by a ſtrap three feet long, in the manner of a trace: the dogs are alſo faſtened together by couples paſſed through their collars; theſe collars are frequently covered with bear's ſkin, by way of ornament.

493 The form of the ſledge is like that of an

* The ſledges for baggage are called *narta*, and are drawn by ten dogs.

† Called *alaki*.

oblong

493 oblong baſket, the two extremities of which are elevated in a curve. Its length is about three feet, and its breadth ſcarcely exceeds a foot. This kind of baſket, which compoſes the body of the ſledge, is of very thin wood; the ſides are of open work, and ornamented with ſtraps of different colours. The ſeat of the charioteer is covered with bear's ſkin, and elevated three feet from the ground, upon four legs, which diverge towards the lower extremity, and are faſtened to two parallel planks, three or four inches broad. Theſe planks are not thick, but ſo long as to extend beyond the body of the ſledge, to which they ſerve as ſupports and and as ſkates. For this purpoſe they are furniſhed underneath, in time of thaw, with three or four long pieces of whale-bone, all of them of the ſame breadth, and faſtened to the ſkates with leathern thongs. In front theſe planks bend upward, and ſo meet the poles of the ſledge, which gradually lower

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493 for that purpoſe, and are adapted to receive a part of the baggage. The front of the ſledge is farther adorned with floating reins or ſhreds of leather, which are of no uſe.
492 The charioteer has nothing in his hand but a curved ſtick, which ſerves him both for rudder and whip. Iron rings are ſuſpended at one end of the ſtick, as much for ornament, as to encourage the dogs by the noiſe which theſe kind of bells make, and which are frequently jingled for that purpoſe; the other end is ſometimes pointed with iron, to make an eaſier impreſſion on the ice, and ſerves at the ſame time to guide the ardour of theſe animals. Dogs, that are well trained, have no need to hear the voice of the conductor; if he ſtrike the ice with his ſtick, they will go to the left; if he ſtrike the legs of the ſledge, they will go to the right; and when he wiſhes them to ſtop, he has only to place the ſtick between the ſnow and the front of the ſledge. When

they

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493 When they flacken their pace, and become careleſs and inattentive to the ſignals, or to his voice, he throws his ſtick at them*; but then the utmoſt addreſs is neceſſary to regain it, as he proceeds rapidly along; and this is one of the ſtrongeſt teſts of the ſkill of the conductor. The Kamtſchadales are ſingularly expert in this exerciſe. I was in general aſtoniſhed at the dexterity they diſplayed in
000 driving their ſledges, and as I was ſoon to have the happineſs of travelling in this vehicle, I conceived that I ought to practice, not ſo much to reconcile myſelf to it, as to learn to be my own guide. It was in vain they repreſented to me the riſks I ſhould run, by expoſing myſelf alone in a ſledge, before I had acquired ſufficient ſkill to know how to conduct it; at my age we are all confident, and I liſtened not to their cautions. The lightneſs of my carriage, which ſcarcely exceeded ten pounds, its elevation,

* This ſtick is called *oſchtol*.

which

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000 which rendered it more liable to be overturned, the difficulty of preſerving the equilibrium, and, in ſhort, the conſequences that might attend a fall, if I loſt my hold of the ſledge*; all theſe conſiderations, which were expoſed to my view, could neither intimidate nor diſſuade me from ſo dangerous an apprenticeſhip. I mounted one day my new car, conſenting however to be followed, and a multitude of ſledges attended me. It was not long before the company ſaw their predictions realized; I had advanced a very little way, when I exhibited a complete fall. Scarcely remounted, I repeated the ſcene, and occaſioned a new burſt of laughter: in ſpite of this, I did not loſe my courage, but quickly recovered myſelf to be overturned again as quickly. I had ſufficient reaſon to be inured to theſe acci-

* The dogs feeling their burthen become lighter, advance with ſuch ſpeed as frequently not to ſtop till they have exhauſted themſelves with fatigue, or daſhed the ſledge to pieces againſt the trees.

dents,

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000 dents, for in every attempt I paid the tribute of inexperience. Seven times did I fall in taking my first lesson, but without receiving any injury; and I only returned with more eagerness to take a second, then a third, then a fourth; in short, a day scarcely passed, without my making some progress. The number of my falls diminished, in proportion as I acquired more knowledge and skill, and my success rendered me such an amateur of this exercise, that in a short time I acquired a degree of reputation; it cost me, however, considerable pains to habituate myself to the observance of the ne-
492 cessary equilibrium. The body is, as it were, in continual motion. Here we must lean to the right, because the sledge inclines to the left; there we must suddenly change to the left, because it leans to the right; the next minute, perhaps our posture must be erect; and if we fail in quickness or attention, it is seldom that an immediate over-

throw

492 throw is not the conſequence. In falling, it is ſtill neceſſary not to quit the vehicle, but to hold it as firm as poſſible, in order to create a ſufficient weight to impede the dogs, who, as I have already ſaid, will otherwiſe advance full ſpeed. The common mode of ſitting in a ſledge is ſide ways, as a lady rides on horſeback; we may alſo ſit aſtride; but the point of main difficulty, the *ne plus ultra* of addreſs and of grace, is to be able to ſtand upon one leg: it is excellent to ſee an adept in this ſtriking attitude.

For myſelf, I was no ſooner able to drive, than I abandoned every other mode of conveyance. Always accompanied, becauſe of the roads, I ſometimes took a ride, and
132 ſometimes went a hunting. The tracks of hares and partridges were perceptible on the ſnow*, and to ſuch a degree, that it appeared

* The ſnow began to fall 5 November, and ſo heavily, that the country was covered almoſt immediately. But the froſt

481 peared full of holes like a ſieve. The ſnow was frequently ſo deep in the woods, that it was impoſſible to proceed a ſtep without ſinking in; our reſource in that caſe was to quit our ſledges, which were no longer ſerviceable to us, and turn them upon their ſide. Having taking this precaution, which was ſufficient to retain our dogs, who immediately laid themſelves down in a circular form upon the ſnow, and patiently waited the return of their guides; we faſtened to the ſoles of our feet, with leathern thongs, rackets, made of thin board*, ſix or eight inches wide and four feet long, the front of which turned up like ſkates, and the bot-

132 froſt being later, and guſts of wind continuing almoſt without ceſſation, the ſledges could not conveniently be uſed till a conſiderable time after, as will be ſeen in the ſequel.

* Theſe rackets are called *ligi*. In the northern part of the peninſula they uſe another ſort of racket, called *lapki*, which are ſhorter, and made of leathern thorns twiſted, like the ſtrings of a tennis racket; two ſmall ſharp pointed bones are fixed in the bottom, which penetrate the ice, and are a preſervative againſt ſliding.

tom

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481 tom was covered with the ſkin of the ſea wolf or rein deer. Furniſhed with theſe kind of 000ſhoes, we continued our chace; I had at firſt ſome difficulty to accuſtom myſelf to them, and I fell more than once both upon my back and my face; but the pleaſure of a good chace made me ſoon forget theſe accidents. Though it was difficult to perceive the hares and partridges, whoſe whiteneſs equalled that of the ſnow, I did not fail, after a little practice, and ſome inſtructions from my companions, to bring home a tolerable number.

This was one of my moſt agreeable diverſions while at Bolcheretſk; the reſt of my hours were occupied in expreſſing my impatience and uneaſineſs, on account of the length of time I was obliged to ſtay there. To give a different turn to my thoughts, I embraced the few fine days that we experienced, to viſit ſome of the environs, which

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000 which I had a ſecond opportunity of viewing upon my departure, and which I ſhall mention when I proceed on my travels. The conſtruction of my travelling ſledges* engaged alſo my attention; but my chief conſolation was the company of M. Kaſloff and the officers of his ſuite. Their converſations, and the enquiries which I made, enabled me almoſt every day to take notes, a part of which I have already tranſcribed, and ſhall now proceed with the reſt.

The diſeaſes that prevail in Kamtſchatka is the firſt article that preſents itſelf. Diſagreeable as may be the details they require, I conceive that I ought not to ſuppreſs them; they form a part of my obſervations, and ſhould have a place in my journals.

* A kind of cloſe coach to ſleep in, and which is fitted to the ſledge. It is like a carriage very common in Ruſſia, called *vezok*; mine was lined with bear's ſkin, and covered with the ſkin of the ſea wolf.

The

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164 The ſmall pox, whoſe ravages I have al-
278 ready mentioned, appears not to be natural
757 to the country, nor is it very common. Since the invaſion of the Ruſſians, and the frequent emigrations that ſucceeded it, this epidemical diſeaſe has only made its appearance in 1767 and 1768. It was then brought into the country by a Ruſſian veſſel bound to the Eaſtern iſlands, for the purpoſe of hunting otters, foxes, and other animals. The perſon, who had in his blood the fatal germ, was a ſailor from Okotſk, where he had taken remedies for the diſorder, previous to his departure; but the recent marks of it were viſible. Scarcely landed, he communicated this cruel malady to the poor Kamtſchadales, which carried off three fourths of them. As it has not appeared ſince, it is ſuppoſed that theſe people are not ſubject to it. In the year 1790 it broke out in the northern part of Kamtſchatka, but it did not ſpread ſo far as the

peninſula.

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164 peninſula. It began at Anadirſkoi; it is
278 not known how it was brought there,
757 though the Ruſſians are alſo accuſed in this
inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed
births. Such as are deformed among them,
have become ſo in conſequence of a con-
ſiderable fall, though this is not a very com-
mon occurrence, as they are accuſtomed to
fall from their balagans. They are but

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They ARE BUT

164 little ſubject to the ſcurvy; their uſe of
757 wild garlic, and various fruits and berries, is a preſervative. The Ruſſians and other ſettlers are more frequently afflicted with this diſeaſe.

Conſumptions are frequent enough; but boils, tumors, abſceſſes, and wens, are very common. They have no mode of curing them, but by inciſion or extirpation; and they uſe for theſe operations a knife, or perhaps ſimply a ſharp ſtone, which ſupplies the place of a lancet. Such inſtruments are calculated to impreſs us with no very high opinion of the ſkill of the operators; and it is obvious that the art of ſurgery, brought to ſuch perfection with us, is in a ſtate of the utmoſt barbariſm at Kamtſchatka.

178 Phyſic does not appear to have made a
756 greater progreſs; though it muſt be confeſſed

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178 feſſed that theſe people have gained ſome-
756 thing by learning to diſtruſt their impoſtors and abſurd empiricks. Formerly, ſelf-created magicians, called *chamans*, taking advantage of the credulity of the Kamtſchadales, turned doctors of phyſic, and thus ſecured to themſelves a double claim to their veneration and confidence*. Their ſtrange dreſs contributed to the impoſition, and ſuited perfectly their extravagant mummeries. What was told me upon the ſubject would exceed the utmoſt ſtretch of faith, if we had never heard of the Bohemians and other ſorcerers of this kind. It is not poſſible to form an idea of the buffooneries of theſe ſuppoſitious phyſicians, and the impertinencies they relate, to make their preſcriptions or pretended revelations go down. It is probable that their cures

* In an oſtrog at ſome diſtance from Bolcheretſk, I had afterwards an opportunity of conſidering this ſubject more fully, and my obſervations will be found in their proper place.

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178 were frequently attended with fatal conſe-
756 quences, and that the number of victims equalled that of their patients. Tired at laſt of being duped at the expence of their lives, the Kamtſchadales began to be diſſatisfied with theſe impoſtors, who gradually loſt their credit, and ſunk into contempt and oblivion. Such has been the fate alſo of the chamans. The feeble light which the Ruſſian commerce diffuſed through the country, proved ſufficient to open the eyes of the inhabitants. They perceived at once the abſurdity of the magic art of their doctors. As it ceaſed to be reſpected, it was no longer lucrative, and the number of magicians diminiſhed of courſe. Diſguſted with the trade, the men abandoned it; and it has ſince been taken up by ſome old women, who, poſſeſſing leſs ſkill, have doubtleſs fewer cuſtomers *.

The

* The revolution which took place in Kamtſchatka reſpecting the chamans, is the preciſe hiſtory of all our mountebanks.

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163 The women of this country have ſeldom
165 more than ten children, the common eſti-
844 mate is four or five, they bear none af-
ter the age of forty. They aſſiſt one an-
other in their deliveries, which are effected
with great facility: meanwhile there are
midwives in Kamtſchatka, but their num-
ber is very ſmall. The accidents which
prove fatal to ſo many mothers, are much
leſs frequent to theſe women, than inſtances
of child-birth in the open air, in roads, or
wherever their occupations call them. On

mountebanks. Similar in their impoſtures, their reign and their fall are ſimilar. Various reflections might be made on this ſubject. That a people equally ſimple and uninformed, like the Kamtſchadales, ſhould for a time have been the dupes of the impoſtures of their magicians, is not aſtoniſhing, and will admit of an excuſe: but that ſuch extreme ignorance and credulity ſhould be made ſenſible of their error, and bluſh at it, is a matter of ſurpriſe and congratulation; for even with the moſt enlightened nations of Europe, do not ſome kinds of chamans ſpring up every day, equally perfidious and deſtructive! They have all in the mean time their apoſtles, their proſelytes, and a prodigious number of martyrs.

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844 these occasions they make use of their hair,
862 I am told, to tie the umbilical cord, carry home their children themselves, and immediately give them suck. They have no limited time for suckling their children, and I have seen instances of its continuing for four or five years. We may judge from this circumstance of the strong constitution of these women. It is observed, however, that Kamtschadales of either sex, do not live longer than Russians.

278 I forgot to mention a remedy to which
825 the inhabitants of this peninsula have voluntary recourse in almost every disease: it is to a root called *bears root*, which they steep in brandy. The name sufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himself upon it when wounded, they imagined it to possess some healing quality, and this

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278 this induced them to make uſe of it. This
825 animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177 The Chriſtian religion was introduced
771 into this country by the Ruſſians; but the
793 inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

177 upon the clergy, whose business it is to en-
771 lighten their ignorance. But are these cle-
793 rical missionaries sufficiently informed themselves? They have no opportunity it must be acknowledged for profound study, and probably it is not required of them, as it is common enough to see a Kamtschadale admitted to this dignified office.

177 These popes are all under the authority
793 of a protapope, or high priest, resident at Nijenei, and he again is subordinate to the archbishop of Irkoutsk, who alone ordains and appoints the clergy to their cures, so that they are all obliged to resort to this settlement. The length and perils of the journey are considered perhaps as a kind of initiation; and without any other merit or examination, they probably receive holy orders: it is certain they return neither wiser nor better. These divines are then sent to their places of destination; the time

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793 time they continue is not limited, and de-
177 pends on the will of their chiefs.

794 There are eight principal churches in Kamtſchatka: Paratounka, Bolcheretſk, Jchinſk, Tiguil, Vercknei, Klutcheſskaïa, and two at Nijenei; to theſe may be added the church of Ingiga, in the country of the Koriacs.

The diſtrict or pariſh of Paratounka includes ſeven oſtrogs and the Kurilles iſlands; viz. the oſtrog of the ſame name, Saint Peter and Saint Paul, Koriaki, Natchikin, Apatchin, Malkin, and Bolcheretſk. The number of pariſhioners contained in theſe oſtrogs, does not exceed four hundred; and including the Kurilles iſlands, the general calculation is not more than ſix hun-
793 dred and twenty Chriſtians. The rector of Paratounka is allowed by the empreſs a

ſalary

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793 ſalary of eighty roubles, and twenty *pouds* * of rye flour. His pariſhioners of conſequence, pay no tythes; but he receives alms and other caſual emoluments attached to his church. For a marriage, a chriſtening, or a burial, theſe prieſts demand whatever they pleaſe. There is no regulation in this reſpect, and every thing is governed ſolely by their caprice, which occaſions conſiderable impoſitions and abuſes. In general however, they endeavour to proportion their demands to the abilities of their pariſhioners, a diſcretion that is entitled to applauſe.

651 R 177 .65 The Kamtſchadales are free. They are ſubject only to an annual tribute to Ruſſia, which conſiſts, as I have already ſaid, in various kinds of furs; ſo that the produce of their chace, turns almoſt entirely to the

* A Ruſſian weight equal to about thirty-three pounds.

advantage

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advantage of the empreſs. Every chief of a family is obliged to furniſh for himſelf and for each of his children, even ſuch as are in their minority, a certain quantity of ſkins equivalent to his ſhare of taxation: this may amount to ſeven roubles more or leſs, and the ſkins, I am told, are generally valued at the loweſt poſſible price. This mode of paying tribute muſt produce a conſiderable revenue to the crown, if we merely judge from the number of ſables the province annually ſupplies, which is ſomething more than four thouſand. The toyon of each oſtrog collects the taxes, and remits them to the treaſurer of the crown; a receipt is previouſly given to every individual of the amount of his tribute, and each Kamtſchadale takes care to mark with his ſeal, or ſome other ſign, all the furs that he delivers.

The current coins are the golden imperial

of

436 R. 177.43 of ten roubles; the rouble, and half rouble. There are very few ſilver coins below this value; a proof that no article of merchandize is expected to produce leſs than half a rouble. Copper and paper money have not yet reached this peninſula. A variety of old ſilver coins of the times of Peter I. Catherine I. and Elizabeth, abound here. A conſiderable branch of commerce may be made of them; the ſilver is purer and more valuable than that of common coins.

465 R. 177.46 The pay of the ſoldiers or Coſſacs is fifteen roubles a year. The officers ſent by government to ſo diſtant a country, receive double ſalaries.

631 R. 177.63 The peninſula of Kamtſchatka, when major Behm preſided at Bolcheretſk, was under the juriſdiction of the government general of Irkoutſk. Upon the departure of this governor, whom the Engliſh ſaw upon

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upon their first arrival in 1779, captain Schmaleff was deputed in his room, and enjoyed for a year the power and satisfaction of doing good to the inhabitants, who entertain for him an equal respect and gratitude. M. Renikin supplied his place in 1780, and was recalled in 1784 for reasons which I am obliged to suppress. At this period the Kamtschatka department was reunited to that of Okotsk. The chiefs and officers of the different ostrogs have since been subject to the orders of the governor at Okotsk, and to the decisions of its courts of justice; these are themselves subordinate and accountable to the governor general residing at Irkoutsk. The present commanding officer, or governor, at Bolcheretsk, which was formerly the capital of Kamtschatka, is now merely a sergeant; the name of the person I left there was *Rastargowieff*, and he had been nominated to the office by M. Kasloff.

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The governors in these various ostrogs are not accountable to one another for their administration, not even inferior officers to their superiors; the authority of each is limited to the inhabitants of his own district; which has doubtless induced the empress to appoint an inspector general, *capitan ispravnick*, whose business is to visit every year all the Kamtschadale villages, receive their complaints, examine their differences, judge them, and punish such as are guilty; in short to maintain order and peace among them. It is also a duty of his function to encourage commerce, particularly their fishing and hunting, to inspect the regular payment of their tribute, the stock of provisions of each individual for his own support, and that of his family, the repairs of the bridges and roads, which unfortunately are very few, and kept in very bad order. In a word, the inspector general should consider it as incumbent upon him to introduce

among

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among theſe people the manners and cuſtoms of Ruſſia. This important office was confided, in 1784, to baron de Steinheil, who fixed his reſidence at Nijenei. Affairs calling him elſewhere, he was ſucceeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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.69

The government is not purely military; there are ſome tribunals eſtabliſhed for hearing and deciding cauſes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtſchatka; they are ſubject to the juriſdiction of the court of Okotſk, in the ſame manner as in Ruſſia the magiſtrates of the ſubordinate towns hold from thoſe of the capital, in whom the final deciſion reſts. There is beſide at Bolcheretſk a kind of conſular juriſdiction, or vocal tribunal, called in Ruſſia *Sloveſnoi-ſoud*. The judges are merchants; they take cognizance of all diſputes relating to commerce,

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merce, and their decisions are either confirmed or annulled by the court to which they are carried by appeal. The Russian code of laws is the only one that is attended to; it is too well known to require that I should enter into particulars; and I could only repeat what has been already related by various historians and travellers better informed upon the subject than myself.

I ought however to add, that the property of the Kamtschadales devolves, of course, upon their decease, to the next heir, or to whomsoever it is bequeathed. The will of the testator is equally respected, and as literally adhered to, as it could be with those nations of Europe who are most scrupulous on the subject of successions.

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Divorces are neither practised or allowed among the Kamtschadales. The Russians seem to court their alliance, though it procures

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586 R 177 .58

cures them no particular priviledge. Their motive is obvious. By frequent marriages, it is possible that before the end of the present generation, the race of the indigenes may be totally extinct.

681 R 177 .68

The penalty of death, abolished in all the dominions of the empress, is never inflicted in Kamtschatka. In their earliest migrations, the Russians, when accused of harassing the natives, were condemned to the knowt; the Kamtschadales also, for various offences, were liable to this cruel punishment; but it is no longer practiced. When the natives are guilty either of petty or capital offences, the punishment is whipping. It may be questioned whether they have gained by the change. The present mode of punishing them being more simple and expeditious, it is resorted to with less scruple, and is liable to frequent abuse.

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197 The Kamtſchadale idiom appeared to me to be uncouth, guttural, and difficult to be pronounced; the words are broken, and the ſounds diſagreeable. There are as many different dialects and accents as there are oſtrogs. For inſtance, upon leaving Saint Peter and Saint Paul, we are aſtoniſhed to hear a different jargon at Paratounka: this is the caſe with villages the neareſt to one another. Notwithſtanding theſe variations of idiom, I conſidered it as incumbent upon me to procure a vocabulary, which will be found at the end of my journal. I ſhall add to it the Koriac, the Tchouktchi, and the Lamout languages. My attention to the ſubject was unremitted, and I received very conſiderable aſſiſtance. I ſhall finiſh the article of my abode at Bolcheretſk, with ſome obſervations that will tend to prove the impoſſibility of my leaving it ſooner.

Towards the end of November the cold became

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TOWARDS THE END OF NOVEMBER THE COLD
132 became on a ſudden ſo ſevere, that in a few
166 days the rivers were all frozen, even the Bol-
226 chaïa-reka, which ſeldom happens, becauſe of the extreme rapidity of its current. The next day it got rid of the ice that covered it, and from that time I ſaw no more ſtop before Bolcheretſk, lower than the houſe of the governor. Though frozen in various places, it preſents a great number chaſms, where the water is ſeen to flow as uſual.

On each ſhore of the peninſula, there is a ſenſible difference in the atmoſphere. During the fine weather, a drought prevailed at Saint Peter and Saint Paul's, whereas at Bolcheretſk they complained of frequent ſhowers; meanwhile autumn had not proved this year more rainy than common. Very heavy rains are injurious in this country, becauſe they occaſion floods, which drive the fiſh from the rivers; a famine moſt diſtreſſing to the poor Kamt-

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132 ſchadales is the reſult, as it happened laſt
166 year in all the villages along the weſtern
226 coaſt of the peninſula. This dreadful calamity occurs ſo frequently in this quarter, that the inhabitants are obliged to abandon their dwellings, and repair with their families to the borders of the Kamtſchatka, where they hope to find better reſources,
000 fiſh being more plentiful in this river. M. Kaſloff had intended to proceed along the weſtern coaſt, having already made his viſit through the eaſt; but the news of this famine determined him, contrary to his wiſhes, to return, rather than be driven to the neceſſity of ſtopping half way, or periſhing with hunger from the difficulty of procuring dogs and proviſion.

132 The wind varied conſiderably during my reſidence at Bolcheretſk; it was moſt commonly weſt, north-weſt, or north-eaſt; it blew ſometimes from the ſouth, but ſeldom

from

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132 from the eaſt. The ſouth and weſt winds are almoſt invariably attended with ſnow. Scarcely a week paſſed, even to the month of January, without our experiencing two or three violent tempeſts; they commonly proceeded from the north-weſt. Theſe gales of wind laſted always a day or two, and ſometimes ſeven or eight days. It would have been the height of imprudence to venture out at ſuch a ſeaſon. The ſky was completely obſcured, and the ſnow, ſupported by theſe whirlwinds, formed in the air a thick fog, that prevented us from ſeeing at the diſtance of ſix yards. Woe to all travellers who are expoſed to this terrible weather! neceſſity compels them to ſtop, or they run the riſk of loſing themſelves, or of falling every moment into ſome abyſs; for how is it poſſible they ſhould find their way, or advance a ſtep, when they have to reſiſt the impetuoſity of the wind, and to diſengage themſelves from the heaps of ſnow

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that ſuddenly encompaſs them? If ſuch be the dangers encountered by the men, what muſt we ſuppoſe the poor dogs to ſuffer. Nothing is more common, when overtaken by theſe hurricanes, than to find ourſelves ſeparated from the ſledges of our companions, to the diſtance of two werſts or upwards from each other, and proceeding in an oppoſite direction*.

The frequency of theſe tempeſts, and the deplorable accidents they occaſion, convinced us of the neceſſity of deferring our departure. M. Kaſloff was equally as impatient to arrive at the place of his deſtination, as I was to continue my journey, that I might execute my commiſſion with the diligence that had been recommended to me; but every one whoſe advice we aſked, condemned our eagerneſs, and proved par-

* Theſe hurricanes prevail chiefly in the months of November, December, and January.

ticularly

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000 Kafloff to Apatchin*, where we arrived about midnight: the diſtance of Bolcheretſk from this oſtrog is forty-four werſts.

A few moments after our arrival a tempeſtuous wind aroſe, which would greatly have incommoded us, if it had happened during our route. It continued the reſt of the night and all the next day, which we were obliged therefore to ſpend at Apatchin.

Here we received the laſt adieux of the inhabitants of Bolcheretſk. I was ſtruck with their gratitude and attachment to M. Kafloff, and the regret they expreſſed at leaving him, as well as their concern for me, and the intereſt they took in the ſucceſs of
609 my journey. I was the more pleaſed with their attentions, as I had obſerved while at Bolcheretſk, that the French nation was not

* I had paſſed through this village on my road to Bolcheretſk, and have deſcribed it, page 65.

held

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609 held in any high eſteem by them; they had even ſo bad an opinion of us, that it was with difficulty they were brought to believe what had been told them of the politeneſs and cordiality of the crews of the French frigates to the inhabitants of Saint Peter and Saint Paul. In proportion howevr as they heard their countrymen extol our conduct, their prejudice grew weaker. I endeavoured by my converſation and behaviour to deſtroy it entirely. I dare not flatter myſelf to have ſucceeded; but it appeared to me that a complete change at laſt took place in their ſentiments reſpecting us.

609 The diſadvantageous impreſſion which
114 they had imbibed of the character and genius of our nation, originated in the perfidy and cruelty exhibited in the perſon of the famous Beniowſky in this part of the peninſula. This ſlave called himſelf a Frenchman, and acted like a true Vandal.

His

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114 His history is known. During the trou-
175 bles of 1769 he served in Poland under the colours of the confederates. His intrepidity induced them to make choice of him to command a medley troop of foreigners, or rather robbers, like himself, whom they kept in pay, not from choice but necessity. With Beniowsky at their head, they ransacked the country, massacring every one they met. He harassed the Russians, to whom he was as formidable as to his own countrymen. They soon felt the necessity of getting rid of so dangerous an enemy: he was taken prisoner, and it may be supposed they adopted no very lenient measures respecting him. Banished to Siberia, and afterwards to Kamtschatka, his fiery and vindictive genius accompanied him. Escaped from the mountains of snow, under which the Russians supposed him to be buried, he suddenly made his appearance at Bolcheretsk with a troop of exiles, to whom he had imparted a spark

of

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114 of his own audacity. He ſurpriſed the gar-
175 riſon and took poſſeſſion of the arms; the governor, M. Nilloff, was killed by his hand. There was a veſſel in the port; he ſeized it: every one trembled at his aſpect; all ſubmitted to his will. He compelled the poor Kamtſchadales to furniſh him with the proviſions he demanded; and not content with the ſacrifices obtained, he gave up their habitations to the unbridled licentiouſneſs of his banditti, to whom he ſet the example of villainy and ferocity. He embarked at length with his companions, and ſailed, it was ſaid, towards China, carrying with him the execrations of the people of Kamtſchatka. This ſuppoſitious Frenchman was the only one they had yet ſeen in the peninſula; and from ſuch a ſpecimen of our nation, they certainly could not love, and had ſufficient reaſon to fear us.

000 M. Schmaleff quitted us at break of day, and

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000 After a few bad nights, ſleep at laſt over-
powered me, and I was inſenſible to all
noiſe. By degrees I became ſo inured to
the cries of theſe animals, that I could re-
poſe in the midſt of them in perfect tran-
231 quillity. I ſhall mention in this place, that
the dogs are only fed once a day, at the end
of their journey; their repaſt conſiſts com-
monly of a dried ſalmon diſtributed to each
of them.

133 The oſtrog of Malkin is ſimilar to thoſe
361 which I have already deſcribed. It con-
tains five or ſix iſbas and a dozen balagans,
is ſituated upon the border of the Biſtraïa,
and ſurrounded with high mountains. I
had no time to viſit the hot ſprings that are
ſaid to be in this neighbourhood, the waters
of which are ſtrongly impregnated with
ſulphur; and one in particular, iſſuing from
the declivity of a hill, forms at the bottom a
baſon of tolerably clear water.

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361 From Malkin we went to Ganal, which is forty-five werſts, but we were unable to travel with the ſpeed we had expected. The Biſtraïa was not completely frozen, and we were obliged to wind about and to croſs woods, where the ſnow, though deep, was ſo far from firm, that our dogs ſunk to their bellies, and were extremely fatigued. This induced us to abandon this road, and make again for the Biſtraïa. We came up to it at ten werſts from Ganal, and found it in the ſtate we had wiſhed. The ſolidity of the ice promiſed us expeditious travelling, and we readily embraced the advantage. We followed this river till we came to the oſtrog which is upon its bank, and conſiſts of four iſbas and twelve balagans. It offered nothing remarkable.

132 We only learned that there had been ſome very terrible hurricanes, and that they had not yet ſubſided, though their force was con-

132 conſiderably diminiſhed. There is no difficulty in accounting for the violence of theſe tempeſts. The ſurrounding high mountains form ſo many receſſes in which the wind is embayed. The fewer avenues it has to eſcape at, the more impetuous it becomes: it ſeeks out a paſſage, ruſhes through the firſt that offers, breaks out in whirlwinds, ſcatters the ſnow over the roads, and generally renders them impaſſable.

000 Having ſpent a very indifferent night in the houſe of the toyon of Ganal, we ſet off the next day for Pouſchiné. The diſtance is ninety werſts, which however we performed in fourteen hours; but the laſt half of the journey was very painful. No road being opened, our ſledges ſunk three or four feet in the ſnow, and the jolts were ſo frequent, that I was happy to eſcape with being only once overturned. We judged from the ſnow upon the trees, that it muſt

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000 have proceeded from the north, and been very heavy, which was confirmed by the inhabitants. Our road lay invariably through a foreſt of birch trees, and for ſome time we loſt ſight of the mountains, by which we had paſſed the preceding evening; but as we drew nearer to Pouſchiné they became viſible again.

354 The Kamtſchatka runs by the lower end
361 of this oſtrog, which is larger than that of
342 Ganal. The only thing I remarked in this place was, that the iſbas had no chimneys; they have only, like the balagans, a narrow opening in the roof to let out the ſmoak, which is frequently cloſed up by a trap door to confine the heat. It is not poſſible to continue in apartments warmed in this manner; we muſt either come out, or proſtrate ourſelves on the floor, if we would eſcape being ſtifled, or at leaſt blinded, by the ſmoke: it does not aſcend directly towards

354 wards the roof, but ſpreads a thick black
342 cloud over the chamber; and as it ſeldom has time wholly to evaporate, the interior part of theſe iſbas is lined with ſoot, which gives them a diſguſting aſpect and a moſt offenſive ſmell.

354 But it is ſtill leſs unpleaſant than the
356 noiſome odour exhaled from a diſmal lamp, that ſerves as a light to the whole houſe. Its form is not of the moſt elegant kind: it is ſimply a hollow pebble or ſtone, with a rag rolled up in the middle for a wick, round which is placed the greaſe of the ſea wolf, or other animals. As ſoon as the wick is lighted, we are immediately ſurrounded with a dark and thick vapour, which contributes equally with the ſmoke to blacken the whole room: it ſeiſes the noſe and throat, and penetrates to the very heart. This is not the only diſagreeable ſmell that is experienced in theſe habitations; there is

356 another, in my opinion, much more fetid, and which I never could endure; it is the nauſeous exhalation from the dried and ſtinking fiſh, when it is preparing, when they are eating it, and even after it is eaten. The refuſe is deſtined for the dogs; but before the poor animals get it, every corner of the room has been ſwept with it.

511 The perſons who inhabit theſe dwellings exhibit a ſpectacle equally diſguſting. Here is a group of women, ſhining from the fat with which they ſmear themſelves, and wallowing on the ground amidſt a heap of rags; ſome of them ſuckling their children, who are half naked, and bedaubed with filth from head to foot; others devouring with them ſome ſcraps of fiſh perfectly raw, and frequently putrid. There we ſee others in a diſhabille that is not leſs filthy, lying upon bear's ſkins, chattering to one another, and frequently altogether,

and

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000 and employed in various domeſtic occupations, in expectation of their huſbands.

Fortunately the houſes of the toyons were cleaned as well as poſſible for the reception of M. Kaſloff, who had always the kindneſs to let me lodge with him.

We ſlept at Pouſchiné in the houſe of the toyon, and departed very early the next morning; we only travelled this day thirty four werſts. It ſeemed that the farther we advanced, the more the roads were obſtructed with the ſnow. My two conductors were continually employed in keeping my ſledge upright, to prevent it from overturning, or going out of the road; they were obliged alſo to exert their lungs to encourage the dogs, who frequently ſtopped, notwithſtanding the blows that were beſtowed upon them with equal profuſion and addreſs. Theſe poor creatures, whoſe ſtrength is inconceivable,

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000 had all the difficulty in the world to diſengage themſelves from the ſnow, which covered them as faſt as they ſhook it off. It was frequently neceſſary to ſmooth it before them, to enable them to extricate the ſledge. This alſo was the office of my guides. To ſupport themſelves upon the ſnow, they each faſtened a racket to one of their feet, and in this manner they ſlid along, reſting now and then their other foot upon the ſkate of the ſledge. I doubt whether any exerciſe can be more fatiguing, or require greater ſtrength and ſkill.

The oſtrog of Charom, at which we had the good fortune to arrive, is ſituated upon the Kamtſchatka: it furniſhed me with no remarks. We paſſed part of the night there, and left it before day.

361 In ſeven hours we reached Vercknei-Kamtſchatka, which is thirty-five werſts from

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361 from Charom. Vercknei is a very confider-
343 able place, compared with the oſtrogs I had hitherto ſeen. I counted more than a hundred houſes. Its ſituation is commodious, and the proſpect round it tolerably various. Beſides bordering upon the river *, it has the farther advantage of being near to woods and fields, the ſoil of which is good, and begins to be cultivated by the inhabitants. The church is built of wood; its architecture is not diſagreeable, and it is only to be wiſhed that the inſide correſponded with the external appearance. The inhabitants differ in no reſpect from thoſe of the other villages. For the firſt time I ſaw at this place a ſpecies of buildings, about the height of a balagan, that ſerve no other purpoſe than to dry fiſh. A ſerjeant had the command at Vercknei, who lives in a houſe belonging to the crown.

* The Kamtſchatka, which was not yet frozen.

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000 This village is alſo the place of reſidence of the unfortunate Ivaſchin, whoſe hiſtory I related upon my leaving Saint Peter and Saint Pauls*; he was of our party, and had only quitted us in order to arrive ſooner at Vercknei, where his firſt care had been to kill one of his oxen, which he entreated us to accept for our journey, as a teſtimony of his gratitude. This proceeding juſtified the concern I felt for him, whoſe aſpect alone made me more than once ſhudder at the idea of his misfortunes. I cannot eaſily conceive how he was able to ſupport them, and reconcile himſelf to his fate: it muſt have been the conſcioufneſs of his innocence alone, that could have given him ſuch ſtrength of mind. We paid him a viſit upon our arrival. He was drinking merrily with ſome of his neighbours. His joy was ſincere, and gave us no intimation of a man

* See page 19.

ſenſible

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000 ſenſible of his paſt ſufferings, or weary of his preſent ſituation.

361 Our ſtay at Vercknei was ſhort; we ſet
563 out after dinner in order to ſleep at Milkovaïa-Derevna, otherwiſe called the village of Milkoff, which was at the diſtance of fifteen werſts. In our way we paſſed a tolerably large field incloſed with palliſades, and farther on a *zaimka*, that is, a hamlet inhabited by labourers. Theſe labourers were Coſſacs, or Ruſſian ſoldiers, employed in the cultivation of land on government account. They had eighty horſes belonging to the crown, and which equally anſwer the purpoſes of induſtry, and of the ſtud eſtabliſhed in this place for the propagation of animals ſo uſeful and ſo ſcarce in the peninſula. About five hundred yards from this hamlet, which is called Iſchigatchi, upon an arm of the Kamtſchatka, is a water mill built of wood, but not very large. No uſe could at pre-

ſent

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563 ſent be made of it. The ſwell of water had been ſo great as to overflow the ſluice, and to ſpread itſelf over a part of the plain where it was frozen. The ſoil appeared to be good, and the country round it to be very pleaſant. I queſtioned the Coſſacs upon the productions of their canton, where I conceived every ſpecies of corn might be cultivated with ſucceſs. They told me that their laſt harveſt had, both in quantity and quality, ſurpaſſed their hopes, and was not inferior to the fineſt harveſts in Ruſſia; two pouds of corn had produced ten.

563 Arrived at Milkoff, I was aſtoniſhed no
361 longer to ſee either Kamtſchadales or Coſ-
241 ſacs, but an intereſting colony of peaſants
R whoſe features and addreſs told me they
177 were not a mixed breed. This colony was
. 24 ſelected in 1743, partly in Ruſſia and partly in Siberia, among the primitive inhabitants, that is, among the huſbandmen. The view

of

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of administration, in sending them into this country was, that they might clear the land and make experiments in agriculture; hoping that their example and success would instruct and encourage the indigenes, and induce them to employ their labours in this advantageous and necessary art. Unfortunately their extreme indolence, which I have already described, little corresponded with the wise intentions of government; and so far are they from pretending to any rivalship, that they have never derived the smallest advantage from the examples that are before their eyes. This extreme sluggishness of the natives is the more painful to an observer, as he cannot but admire the industry of these active emigrants, whose labours have been attended with such beneficial effects. Their habitations, situated upon the Kamtschatka, seem to shew that they live at their ease. Their cattle thrive well from the great care they take of them.

I observed

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I obſerved alſo that theſe peaſants had in general very much the air of being contented with their ſituation. Their labour is profitable, and not exceſſive. Every man plows and ſows his field, and having only his capitation to pay, he reaps abundantly the fruit of his exertions, which a fertile ſoil repays him with uſury. I am convinced that greater advantages might be derived from this ſource, if the cultivators were more numerous. The harveſt conſiſts chiefly of rye, and a very ſmall quantity of barley. This colony has nothing to do with the chace. Government extended its cares ſo far as to prohibit it, that their labours might be wholly devoted to agriculture, and that nothing might divert their attention. The prohibition however, I could perceive, is not very ſcrupulouſly obſerved. Their chief is a *ſtaroſte*, appointed by adminiſtration, and ſelected from the old men of the village, as the name implies. His buſi-

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neſs is to inſpect the progreſs of agriculture; to preſide over their ſeed time and their harveſt, to fix the preciſe period when they are to take place; in ſhort, to ſtimulate the negligence, or encourage the zeal of the labourers, and particularly to maintain the ſpirit of the eſtabliſhment and a good underſtanding among them.

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Being deſirous of going to Machoure, to ſpend a day with the baron de Steinheil, I left M. Kaſloff at Milkoff, and ſet out twenty four hours before him, that I might occaſion no delay in his journey. To travel with the greater expedition I made uſe of a ſmall ſledge. The roads were no better or leſs obſtructed with ſnow than what we had before experienced, and I was therefore unable to make the ſpeed I intended, notwithſtanding my precaution. The firſt village I came to was Kirgan. Before I reached it, I paſſed a number of houſes and

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balagans

361 balagans that appeared to be deſerted, but I was informed that the ſummer regularly brought back every year their proprietors. The few habitations which compoſe the oſtrog of Kirgan, are built upon the border of a river called Kirganik, which is formed by a variety of ſtreams that iſſue from then eighbouring mountains, and unite above the oſtrog, fifteen werſts from Milkoff.

The cold was ſo ſevere, that notwithſtanding the precaution I took of covering my face with a handkerchief, my cheeks were frozen in leſs than half an hour. I had recourſe to the uſual remedy, that of rubbing my face with ſnow, and was relieved at the expence of an acute pain that continued for ſeveral days. Though my face was thus frozen, the reſt of my body experienced the contrary effect. I conducted my own ſledge; and the continual motion

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291 motion which this exercise requires, added to the weight of my Kamtschadale dress, threw me into a violent perspiration, and fatigued me extremely.

My dress merits a particular description; by which it will be seen that it gave me no very alert appearance. Commonly I wore merely a simple parque of deers skin, and a fur cap, which upon occasion would cover my ears and part of my cheeks. When the cold was more piercing, I added to my dress two *kouklanki*, a kind of parque that was larger and made of thicker skin; one of them had the hair on the inside, and the other on the outside. In the severest weather, I put on over all this, another kouklanki, still thicker, made of argali, or dogs skin, the hairy side of which is always undermost, and the leather or external surface of the skin painted red. To these

291 kouklankis a ſmall bib is fixed before, ſo as to guard the face againſt the wind: they have alſo hoods behind, which fall upon the ſhoulders. Sometimes theſe three hoods, one upon another, compoſed my head dreſs, by being drawn over my common cap. My neck was defended by a cravat called ocheinik, made of ſable, or the tail of a fox, and my chin with a chin-cloth made in like manner of ſable, and faſtened upon my head. As the forehead is very ſuſceptible of cold, it was covered with an otter or ſable fillet, and this was covered again by my cap. My fur breeches gave me more warmth than all the reſt of my dreſs, complicated as it was. I had double deer-ſkin ſpatterdaſhes, with hair on both ſides, and which are called in Kamtſchatka *tchigi*. I then put my legs into boots made of deers ſkins, the feet having an interior ſole of *tounchitcha*, a very ſoft graſs, which has the quality of preſerving heat. Notwithſtanding

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291 ing these precautions, my feet, after travelling two or three hours, were very wet, either from perspiration or the gradual penetration of the snow; and if I stood still for a moment in my sledge, they became immediately frozen. At night I took off these spatterdashes, and put on a large pair of fur stockings made of deer or argali skin, and called *oumti*.

000 Notwithstanding my fatigue, I made no stop at Kirgan. A few wersts farther on, I perceived a volcano to the north, which emitted no flame, but a column of very thick smoke ascended from it. I shall have occasion to return this way, and will then speak of it more at large. I observed near Machoure a wood of firs, tolerably bushy, and which was the first I had seen in Kamtschatka. The trees were strait, but very slender. At two o'clock in the afternoon I entered the village of Machoure, which is

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000upon the Kamtſchatka, and thirty-ſeven werſts from Kirgan.

I alighted at the baron Stenheil's, formerly *capitan iſpravnick*, or inſpector of Kamtſchatka, an office afterwards conferred on M. Schmaleff. Our acquaintance had commenced at Bolcheretſk. I was delighted to be able to converſe with him in ſeveral languages, particularly that of my own country, though it was not very familiar to him; but it was French, and I conceived him to be my countryman. Whoever has quitted Europe to travel in ſo diſtant a part of the world muſt have had ſimilar feelings. We conſider every man as a fellow-citizen who belongs to the ſame continent, or ſpeaks the ſame language. The moſt trivial circumſtance that reminds us of our country, is productive of a very ſenſible pleaſure; the heart is eagerly drawn towards the friend, the brother, whom we conceive we have found,

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000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

161 The oſtrog of Machoure, before the in-
361 troduction of the ſmall-pox, was one of the
756 moſt conſiderable in the peninſula; but the
609 ravages of this cruel diſeaſe, have reduced
797 the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

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177 men and women, are chamans, or believers
756 in the witchcraft of these pretended sorcer-
797 ers. They dread to an excess the popes or
609 Russian priests, for whom they entertain the most inveterate hatred. They do all they can to avoid meeting them. This is sometimes impossible, and in that case, when they find them at hand they act the hypocrite, and make their escape the first opportunity that offers. I attribute this fear to the ardent zeal which these priests have doubtless shown for the extirpation of idolatry, and which the Kamtschadales consider as persecution. They accordingly look upon them as their greatest enemies. Perhaps they have reason to believe, that in wishing to convert them, the overthrow of their idols was not the only thing these missionaries had in view. These popes probably set them no example of the virtues upon which they declaim. It is suspected that their object is the acquisiton of wealth,

rather

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797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka* *, and place in him ſo
224
756 entire a confidence, that they addreſs their prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller,

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756 Koutka their new-born children, who, the
776 moment they have left their cradle, are des-
786 tined to become chamans. The veneration
534
177 of the inhabitants of this village for force-
cerers can ſcarcely be conceived; it ap-
proaches to inſanity, and is really to be
pitied; for the extravagant and wild ab-
ſurdities by which theſe magicians keep
alive the credulity of their compatriots,
excites our indignation rather than our
laughter. At preſent they do not profeſs
their art openly, or give the ſame ſplendour
they once did to their necromancy. They
no longer decorate their garments with
myſtic rings and other ſymbolic figures of
metal, that jingled together upon the ſlight-
eſt motion of their body. In like manner
they have abandoned the kind of kettle *,
which they uſed to ſtrike with a ſort of
muſical intonation in their pretended en-

* A ſort of *tambour de vaſque* called *bouben*. It is ſtill in uſe amongſt the Yakoutſk, as will be ſeen hereafter.

chantments,

[Mashura--analyst]

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756 chantments, and with which they announc-
786 ed their approach. In ſhort, they have for-
787 ſaken all their magic inſtruments. The following are the ceremonies they obſerve in their aſſemblies, which they are careful to hold in ſecret, though not the leſs frequently on that account. Conceive of a circle of ſpectators, ſtupidly rapt in attention and ranged round the magician, male or female, for as I have before obſerved, the women are equally initiated into the myſteries. All at once he begins to ſing, or to utter ſhrill ſounds without either meaſure or ſignification. The docile aſſembly ſtrike in with him, and the concert becomes a medley of harſh and insupportable diſcords. By degrees the chaman is warmed, and he begins to dance to the confuſed accents of his auditory, who become hoarſe and exhauſted from the violence of their exertions. As the prophetic ſpirit is excited in the miniſter of their Koutka, the animation

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756 mation of the dance increaſes. Like the
786 Pythian on the tripos, he rolls his ghaſtly
787 and haggard eyes; all his motions are convulſive; his mouth is drawn awry, his limbs ſtiffened, and every diſtortion and grimace is put in practice by him, to the great admiration of his diſciples. Having acted theſe buffooneries for ſome time, he ſuddenly ſtops, as if inſpired, and becomes now as compoſed as he was before agitated. It is the ſacred collectedneſs of a man full of the god that governs him, and who is about to ſpeak by his voice. Surpriſed and trembling, the aſſembly is inſtantly mute, in expectation of the marvels that are to be revealed. The ſelf-created prophet then utters at different intervals, broken ſentences, words without meaning, and what ever nonſenſe comes into the head of the impoſtor; and this is invariably conſidered as the effect of inſpiration. His jargon is accompanied either with a

torrent

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756 torrent of tears or loud burſts of laughter,
786 according to the complexion of the tidings
787 he has to announce; and the expreſſion and geſture of the orator vary in conformity to his feelings. I was furniſhed with this account by perſons entitled to credit, and who had contrived to be preſent at theſe abſurd revelations.

000 There ſeems to be ſome analogy between theſe chamans, and the ſect called quakers. The quakers pretend equally to inſpiration, and there are individuls among them, who, guided by its ſuppoſed impulſe, hold forth in their ſilent meetings, and break out in piteous lamentations, or ſudden ſtarts of extravagant joy. The difference is this: theſe prompt orators harangue extempore upon the ſubject of morality, whoſe fundamental principles they endeavour to recommend; whereas the Kamtſchadale declaimers underſtand not a word of what they

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000 iſſuing from the mountains, and uniting at this place to pay their tribute together to the Kamtſchatka. Neither of them was frozen, which I aſcribed to the extreme rapidity of their current. The ſpot where we paſſed them was truly pictureſque; but the moſt ſingular object was the numerous firs that ſkirted theſe rivers, and which ſeemed like ſo many trees of ice. A thick hoar-froſt, occaſioned perhaps by the dampneſs of the place, covered every branch, and gave to the whole a bright and chryſtalline appearance.

133 At ſome diſtance from Tolbatchina we croſſed a heath, from which I could perceive three volcanos; none of them threw up any flames, but merely clouds of very black ſmoke. The firſt, which I before mentioned in going to Machoure, has its reſervoir in the bowels of a mountain that is not exactly of a conical ſhape, the ſummit being flattened and but little elevated.

This

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133 This volcano, I was informed, had been at reſt for ſome time, and was ſuppoſed to be extinguiſhed, but it had lately kindled again. North-eaſt of this is a peak, the top of which appears to be the crater of a ſecond volcano, which continually throws up ſmoke, though I could not perceive the ſmalleſt ſpark of fire. The third is north-north-eaſt of the ſecond; I could not obſerve it as I wiſhed, a high mountain intercepting almoſt entirely my view. It derives its name from the village of Klutcheſkaïa, near which it is ſituated; and I was told that we ſhould paſs cloſer to it hereafter. The two other volcanos are called in like manner after the oſtrog of Tolbatchina, where we arrived in good time. This village is upon the Kamtſchatka, forty-four werſts from Chapina, but it contains no-
585 thing extraordinary. We were informed
177 that there had been a Kamtſchadale wedding in the morning. I regretted the not

 having

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585 having been present at this ceremony, which,
177 as I was told, is nearly the same as in Russia.
582 I saw the new married couple, who appeared to be two children. I asked their age. The bridegroom was but fourteen, and the bride only eleven. Such marriages would be considered as premature in any country except Asia.

000 I had an extreme desire to see the town of Nijenei-Kamtschatka, and had long thought how to satisfy it; to have left the peninsula without visiting the capital, I should have considered as an unpardonable fault. My curiosity did not interfere with my resolution of travelling with all possible expedition. I was obliged indeed to make a circuit, but it was not so far as to occasion a delay of any consequence. Having concerted with M. Kasloff, who was anxious to procure every thing that could render my journey agreeable and safe, I engaged

to

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000 to join him at the village of Yelofki, where the arrangement of ſome affairs of his government would detain him ſeveral days.

That I might loſe leſs time, I took leave of him the evening of our arrival at Tolbatchina. But the roads were ſtill worſe than any we had yet met with. It was with the utmoſt difficulty I could reach Koſirefski by break of day, a village ſixty-ſix werſts from Tolbatchina.

I made no ſtay, elated with having happily eſcaped all the dangers that beſet me in ſo terrible a road, and in the darkneſs of the night*. I conceived that I had nothing to fear in the day, and proceeded with a kind of confidence for which I was

* I learned afterwards that the ſledge of M. Kaſloff, who paſſed at noon day, had barely eſcaped from being daſhed to pieces in running againſt a tree, and that two of his conductors had been hurt by the violence of the ſhock.

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000 ſoon puniſhed. After having travelled a conſiderable number of werſts upon the Kamtſchatka, which I had been delighted to find again, and the width of which in this place particularly ſtruck me, I was obliged to quit it and enter a ſort of ſtrait, where the ſnow, driven by the hurricanes, preſented an uneven and deceitful ſurface. It was impoſſible to ſee or avoid the rocks that ſurrounded me. I preſently heard a crack that told me my ſledge was damaged; it was in reality one of my ſkates broken in two. My guides aſſiſted me in adjuſting it in the beſt manner we could, and we had the good fortune to reach Ouchkoff without any other accident. It was midnight, and we travelled this day ſixty-ſix werſts. My firſt care was to refit my ſledge, which detained me till the next day.

361 There are in this village one iſba, and
136 eleven balagans; the number of inhabitants
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is

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is reduced to five families, who are divided 361
into three yourts. In the neighbourhood 136
is a lake which abounds ſo much with fiſh, 438
that all the villages round reſort to it for their winter ſtock. It is alſo a conſiderable reſource for the capital, which would otherwiſe be almoſt deſtitute of a proviſion of the firſt neceſſity throughout the peninſula.

I left Ouchkoff early in the morning, and 361
at noon had travelled forty-four werſts, partly upon the Kamtſchatka, and partly acroſs extenſive heaths. The firſt village I came to was Kreſtoff. It was a little larger than the preceding oſtrog, but ſimilar in other reſpects to what I had before ſeen. 000
I only ſtayed to change my dogs. Hitherto I had purſued the road which M. Kaſloff was to take to get to Yelofki; but inſtead of proceeding like him to Khartchina, I directed my courſe, upon coming out of

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000 Kreſtoff, towards the village of Klutcheſ-
kaïa, which is thirty werſts from it.

The weather, which, ſince our departure from Apatchin, had been very fine, though cold, changed all of a ſudden in the after-
133 noon. The ſky became clouded, and the wind, which roſe in the weſt, brought us a heavy ſnow. It extremely incommoded us, and prevented me from examining as I could have wiſhed, the volcano of Klutchefskaïa, which I had ſeen at the ſame time with thoſe of Tolbatchina. As far as I could judge, the mountain that carries it in its womb, is conſiderably higher than the other two. It continually throws up flames, which ſeem to aſcend from the midſt of the ſnow, with which the mountain is covered to its very ſummit.

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R Upon the approach of night I came to
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.24 the village of Klutchefskaïa. The inhabi-
tants

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tants are all Siberian peaſants, from the neighbourhood of the Lena, and were ſent about fifty years ago into this part of the peninſula to cultivate the land. The number of males, including men and children, ſcarcely exceed fifty. The ſmall-pox attacked only thoſe who had not before been affected with it; but it carried off more than one half of them. Theſe labourers are leſs happy than thoſe who live in the neighbourhood of Verknei-Kamtſchatka. The quantity and quality of their laſt harveſt, both rye and barley, exceeded their hopes. Theſe peaſants have many horſes belonging to them; in the mean time there are ſome which are the property of government.

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This oſtrog is tolerably large, and appears the more ſo from being divided into two parts, about four hundred yards from each other. It extends principally from

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eaſt to weſt. To the eaſtward is ſituated the church, which is built of wood, and in the Ruſſian taſte. The majority of houſes are better conſtructed, and are more clean, than any I have yet ſeen. There are alſo ſome conſiderable magazines. The number of balagans is ſmall, and they are very unlike thoſe of the Kamtſchadales; their form is oblong, and their roof, which has the ſame declivity as ours, reſts upon poſts, which ſupport it in the air.

The Kamtſchatka paſſes at the bottom of the oſtrog; it is never entirely frozen in this part. In ſummer it frequently overflows and enters the very houſes, though they are all of them built upon an eminence.

Four werſts eaſt of the church of Klutchefskaïa, is another *zaimka*, or little hamlet, inhabited by Coſſacs or labouring ſoldiers,

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diers, whoſe harveſts belong to government: but I cannot get out of my way to examine it.

I made a very ſhort ſtay at Klutcheſkaïa, my impatience to ſee Nijenei inducing me to leave it the ſame evening in order to reach Kamini, a Kamtſchadale village, twenty werſts farther. I arrived at midnight, but merely paſſed through it.

Before day I was at Kamokoff, twenty werſts from Kamini. I ſoon arrived at Tchokofskoi, or Tchoka, which is twenty-two werſts farther. From thence to Nijenei, the diſtance is the ſame, and I travelled it equally in a few hours. I had the pleaſure of entering a little before noon into this capital of Kamtſchatka, which is ſeen at a conſiderable diſtance, but its appearance is neither ſtriking nor agreeable.

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361 It preſents to our view merely a cluſter of
132 houſes, with three ſteeples riſing above them, and is ſituated upon the border of the Kamtſchatka, in a baſon formed by a chain of mountains that raiſe their lofty heads around it, but which are however at a tolerable diſtance. Such is the poſition of the town of Nijenei, of which I had a higher opinion before I ſaw it. The houſes, amounting to about a hundred and fifty, are of wood, built in a very bad taſte, ſmall, and buried beſide under the ſnow, which the hurricanes collect there. Theſe hurricanes prevail almoſt continually in this quarter, and have only ceaſed within a few days. There are two churches at Nijenei, one is in the town, and has two ſteeples; the other belongs to, and is in the circuit of the fort. Theſe two buildings are wretchedly conſtructed. The fort is almoſt in the middle of the town, and is a large paliſaded encloſure of a ſquare form. Beſides the church,

the

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361 the enclosure contains also the magazines, the arsenal, and the guard-house: a sentinel is stationed at the entrance both day and night. The house of the governor, major Orleankoff, is near the fortress, and, its size excepted, is similar to the rest of the houses; it is neither higher, nor built in a better taste.

000 I alighted at the house of an unfortunate exile, named Snafidoff, who had suffered the same punishment as Ivaschkin, nearly at the same time, but for different causes: like Ivaschkin, he had been banished to Kamtschatka ever since the year 1744.

I had scarcely entered, when an officer from M. Orleankoff came to congratulate me upon my happy arrival. He was followed by many of the principal officers of the town, who came one after another in the most obliging manner to offer me their services.

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000 over the remembrance of all the pleasures of the day.

The next day I was invited to the house of the protapope, uncle to the bride, where the entertainment was similar to that of the
177 preceding one, except the fire-work. I have
793 already observed, that the protapope is chief of all the churches in Kamtschatka. The clergy throughout the peninsula are subordinate to him, and he has the decision of all ecclesiastical affairs. His residence is at Nijenei. He is an old man, not entirely deprived of his vigour, with a long white beard which flows down upon his breast and gives him a truly venerable appearance. His conversation is sensible, sprightly, and calculated to gain him the respect and affection of the people.

177 There are two tribunals at Nijenei, one
692 that concerns the governments, and the other

takes

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177 takes cognizance of all mercantile diſputes.
692 The magiſtrate who preſides in the latter, is a kind of burgomaſter, ſubject to the orders of the *gorodnitch*, or governor of the town. We have already ſeen that each of theſe juriſdictions holds from the tribunal of Okotſk, to the governor of which it is accountable for all its proceedings.

563 But what moſt intereſted me at Nijenei, and what I cannot paſs over in ſilence, was my finding there nine Japaneſe, who had been brought thither in the preceding ſummer, from the Aleutienne iſlands, by a Ruſſian veſſel employed in the trade of otter ſkins.

One of the Japaneſe informed me, that he and his companions had embarked in a ſhip of their own country, with an intention of viſiting the more ſouthern Kurilles iſlands, for the purpoſe of trading with the

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563 the inhabitants. They directed their course along the coast, and were at a small distance from it, when they were overtaken by a violent gale, which carried them out to sea, and deprived them of all knowledge where they were. According to his account, which however I did not altogether believe, they beat about in the ocean for near six months without seeing land; of course they must have had a plentiful stock of provisions. At length they discerned the Aleutienne islands, and transported with joy, they determined to make for that coast, without well knowing in what part of the world it was. They accordingly cast anchor near one of the islands, and a small shallop brought them to land. At this place they found certain Russians, who proposed to them to unlade their vessel, and remove it to a place of security; but either from suspicion, or perhaps that they thought the next day would be early enough, the Japa-

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563 nese peremptorily refused. They had soon occasion to repent of their negligence. That very night there arose a strong gale, during which their ship stranded; and as this was not discovered till break of day, they had the utmost difficulty to save a small part of the cargo, and some pieces of the vessel, which had been almost entirely constructed of cedar. The Russians, who had before treated them with civility, now exerted every effort in their power to make these unfortunate people forget their loss. They at length persuaded them to accompany them to Kamtschatka, whither they were bound upon their return. My Japanese added, that they had at first been much more numerous, but that the fatigues of the sea, and afterwards the rigour of the climate, had taken off many of his companions.

My informer appeared to have over his eight countrymen a very distinguished superiority;

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563 riority; and he informed us that he was himſelf a merchant, and the reſt only ſailors under his command. Certain it is, that they entertain for him a ſingular veneration and friendſhip. They are penetrated with grief, and ſhew the greateſt uneaſineſs when he is indiſpoſed, or the leaſt unfavourable accident has befallen him. They regularly ſend twice a day one of their body to wait upon him. His friendſhip for them may be ſaid not to be leſs; not a day paſſes without his viſiting them, and he employs the greateſt care that they ſhould be in want of nothing. His name is Kodaïl: his figure has nothing in it ſingular, and is even agreeable; his eyes do not project like thoſe of the Chineſe; his noſe is long, and he has a beard which he frequently ſhaves. He is about five feet in ſtature, and is tolerably well made. At firſt he wore his hair in the Chineſe faſhion; that is, he had a ſingle lock depending from the middle of his head, the reſt

563 of his hair round it being close shaved; but he has lately been persuaded to let it grow, and to tie it after the French fashion. He is extremely apprehensive of cold, and the warmest garments given him are scarcely able to save him from it. Under these he constantly wears the dress of his country: this consists in the first place of one or more long chemises of silk, like our dressing gowns; and over these he wears one of woollen, which seems to imply that this sort of materials is more precious in their estimation than silk. Perhaps however the circumstance arises from some motive of convenience, of which I am ignorant. The sleeves of this garment are long and open; and, in spite of the rigour of the climate, he has constantly his arms and his neck uncovered. They put a handkerchief about his neck when he goes abroad, which he takes off as soon as he enters a house, being, as he says, unable to support it.

His

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563 His ſuperiority over his countrymen was calculated to make him be diſtinguiſhed; but this circumſtance has leſs weight than the vivacity of his temper and the mildneſs of his diſpoſition. He lodges and eats at the houſe of major Orleankoff. The freedom with which he enters the houſe of the governor and other perſons, would among us be thought inſolent, or at leaſt rude. He immediately fixes himſelf as much at his eaſe as poſſible, and takes the firſt chair that offers; he aſks for whatever he wants, or helps himſelf, if it be within his reach. He ſmokes almoſt inceſſantly; his pipe is ſhort, and ornamented with ſilver; he puts into it a very ſmall quantity of tobacco, which he renews every moment. To this habit he is ſo much addicted, that it was with difficulty they could perſuade him to part with his pipe even at meals. He is poſſeſſed of great penetration, and apprehends with admirable readineſs every thing

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563 you are defirous to communicate. He has much curiofity, and is an accurate obferver. I was affured that he kept a minute journal of every thing he faw, and all that happened to him. Indeed the objects and the cuftoms he has an opportunity to obferve, have fo little refemblance to thofe of his country, that every thing furnifhes him with a fubject of remark. Attentive to whatever paffes, or is faid in his prefence, he puts it into writing, for fear of forgetting it. His characters appeared to me confiderably to refemble the Chinefe, but the form of writing is different, thefe writing from right to left, and the Japanefe from the top of the page to the bottom. He fpeaks Ruffian with fufficient eafe to make himfelf underftood; you muft however be ufed to his pronunciation to converfe with him, as he delivers himfelf with a volubility that frequently obliges you to mifs fomething he fays, or apprehend it in a wrong fenfe. His

repartees

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563 repartees are in general ſprightly and natural. He employs no concealment or reſerve, but tells with the utmoſt frankneſs what he thinks of every one. His company is agreeable, and his temper tolerably even, though with a conſiderable tendency to ſuſpicion. Does he miſs any thing? he inſtantly imagines that it has been ſtolen from him, and diſcovers anxiety and diſquietude. His ſobriety is admirable, and perfectly contraſts with the manners of this country. When he has determined to drink no ſtrong liquor, it is impoſſible to induce him ſo much as to taſte it; when he is inclined, he aſks for it of his own accord, but never drinks to exceſs. I obſerved alſo, that, after the manner of the Chineſe, in eating he made uſe of two little ſticks, which he handled with great dexterity.

I requeſted to ſee ſome of the coin of his country, and he readily gratified my cu-

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000 riosity. The gold coin was a thin plate of an oval form, and of about two inches in its longest diameter. It is marked with various Japanese characters, and it appeared to be of pure gold, without any alloy, so that it readily bent in any manner you pleased. Their silver money is square, smaller, thinner, and lighter than that of gold; he however assured me that at Japan this was the superior coin. The copper coin is precisely the same as the *cache* of the Chinese: it is round, and nearly of the size of our two *liard* pieces, with a square perforation in the middle.

563 I asked him some questions respecting the nature of the merchandize they had saved from their wreck, and I understood, from his answer, that it consisted chiefly in cups, plates, boxes, and other commodities of that sort, with a very fine varnish. I after-

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563 afterwards found they had ſold a part of them at Kamtſchatka.

000 I truſt I ſhall be forgiven this digreſſion upon theſe Japaneſe; I can ſcarcely imagine that it will be thought impertinent; it will aſſiſt us in becoming acquainted with a nation that we have ſcarcely an opportunity to ſee and obſerve.

Having ſpent three days at Nijenei Kamtſchatka, I left it 12 February at one o'clock in the afternoon, to meet M. Kaſloff, whom I was ſure of finding at Yelofki. My road for ſome time was the ſame as I had already travelled in going to Nijenei, and I arrived at Tchoka early in the evening. A ſtrong weſterly wind almoſt always prevails in this place. The ſituation of the oſtrog ſufficiently accounts for it, which is upon a river that runs between two chains of mountains

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guides, notwithſtanding their knowledge of the roads, could no longer be anſwerable for not miſleading us. We could not prevail on them to conduct us any farther: and yet it was dreadful to lie to at the mercy of ſo impetuous a hurricane. As to myſelf, I confeſs that I began to ſuffer extremely, when our guides propoſed to lead us to a wood that was not far off, and where we ſhould at leaſt find ſome kind of ſhelter. We heſitated not a moment to avail ourſelves of their civility; but before we quitted the road, it was neceſſary to wait till our ſledges could be aſſembled, or we ſhould otherwiſe run the riſk of being ſeparated from one another, and entirely loſt. Having effected this, we gained the wood, which was happily at the diſtance that we had been informed. Our halt took place about two o'clock in the afternoon.

The firſt care of our Kamtſchadales was

to

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000 to dig a hole in the ſnow, which was in this place at leaſt ſix feet deep; others fetched wood, and a fire being quickly lighted, the kettle was ſet on. A light repaſt, and a ſmall dram of brandy, ſoon recovered all our company. As the night approached, we were employed upon the means of paſſing it in the leaſt uncomfortable manner. Each prepared his own bed: mine was my vezock, where I could lie down at my eaſe; but except M. Kaſloff, there was no other perſon who had ſo convenient a carriage. How, ſaid I to myſelf, will theſe poor crea-
513 tures contrive to ſleep? I was ſoon relieved from my anxiety on their account. The manner in which they prepared their beds, deſerves to be mentioned, though they did not obſerve much ceremony on the occaſion. Having dug a hole in the ſnow, they covered it with the branches of trees, the ſmalleſt they could get; then wrapping themſelves up in a *kouklanki*, with the hood drawn over their

513 their heads, they lay down on their bed as if it were the beſt in the world. As to our dogs, they were unharneſſed, and tied to the trees that were near us, where they paſſed the night in their uſual manner.

The wind having conſiderably abated, we proceeded on our journey before it was light. We had thirty werſts to Ozernoï, where it had been our intention to have ſlept the preceding evening. We arrived at ten o'clock in the morning, but our dogs being extremely fatigued, we were obliged to ſpend the reſt of the day, and even the night there, in hopes that the wind, which began to blow ſtill more violently in the afternoon, would ſubſide during the interval.

361 The oſtrog takes its name from a lake that is near it. The river Ozernaïa, which is but ſmall, runs at the bottom of the village.

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361 lage. The houſe of the toyon was the only ſba I ſaw, and I was informed that we ſhould meet with no more of theſe kind of buildings till we came to the town of Ingiga. There were, however, fifteen balagans and two yourts. I might here deſcribe theſe ſubterraneous habitations; but as they are ſmall in compariſon with thoſe which I ſhall ſoon have an opportunity of examining, I ſhall defer my deſcription for the preſent.

000 We paſſed alſo the 21 February at Ozernoï, in fruitleſs expectation of a ſerjeant of M. Kaſloff's ſuite, who had been ſent to Nijenei-Kamtſchatka.

The next day we reached Ouké at a tolerably early hour, which is only twenty ſix werſts. There we waited again for the ſerjeant, who had been ordered to join us at this place. But he did not come.

There

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361 There is but one iſba at Ouké, which, together with a dozen balagans and two yourts, form the whole oſtrog. One of the yourts had been cleaned for M. Kaſloff, and we paſſed the night in it.

000 We left this village at break of day, and half way on our journey we ſaw a certain number of balagans, which are only inhabited, I was informed, in the fiſhing ſeaſon. Near this place we met the ſea again, and travelled on the ſhore for ſome time. I was extremely mortified at not being able to ſee at what diſtance it was frozen, nor what was the direction of this part of the eaſtern coaſt of Kamtſchatka. A north wind incommoded us, and impelled the ſnow with ſuch violence againſt us, that our whole attention was engroſſed by guarding our eyes from it; there was alſo a fog that extended from the ſhore to a conſiderable diſtance on the ſea, and intercepted almoſt entirely

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000 entirely the view of it. The inhabitants of the country, whom I interrogated upon the ſubject, informed me we had juſt paſſed a bay of no very conſiderable width, and that the ſea was covered with ice as far as thirty werſts from the land.

361 At Khaluli, an oſtrog, ſituated upon a river of the ſame name, ſixty ſix werſts from Ouké, and at a ſhort diſtance from the ſea, I found but two yourts and twelve or thirteen balagans; but I had the pleaſure
281 of ſeeing a baidar covered with leather.
501 This boat was about fifteen feet long and four wide; the hull was made of planks tolerably thin, and croſſing each other; a longer and thicker piece of wood ſerved as the keel; the timbers were made faſt with leathern ſtraps; and the whole was covered over with ſeveral ſkins of ſea horſes and large ſea wolves.

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281 I particularly admired the manner in
501 which theſe ſkins were prepared, and the compactneſs with which they were ſewn together, ſo that the water could not penetrate into the boat. Its ſhape was ſomewhat ſimilar to ours, but leſs round, and therefore leſs graceful; it converged towards the extremities, ſo as to terminate in a point, and had a flat bottom. The lightneſs of the common baidars, which makes them liable to be overturned, doubtleſs gave riſe to this mode of conſtructing them, by which they acquire more weight. This boat was placed under a ſhed built on purpoſe to protect it from the ſnow. The toyon of Khaluli having given up his yourt to us, we ſlept in it, being unable to proceed till the next day. The wind had increaſed ſince our arrival, and did not abate till the middle of the night.

000 At ten o'clock in the morning we had loſt ſight

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166 At ten o'clock in the morning we had left
361 ſight of Khaluli, and paſſed an old village of the ſame name, which had been lately deſerted on account of its bad ſituation. Farther on we found ſome more deſolated habitations, formerly the oſtrog of Ivaſchkin, and which had been removed, for a ſimilar reaſon, thirty werſts from its former ſituation. We came again to the ſea, and travelled for ſome time on the eaſtern coaſt. It forms another bay at this place, which I was deſirous of examining, but was, as before, prevented by the fog. I obſerved that the fog cleared up in proportion as the wind veered to the north-eaſt, which had hitherto been weſt and north-weſt.

361 Ivaſchkin is forty werſts from Khaluli, and very near to the ſea. It contains two yourts and ſix balagans, and is ſituated upon a ſmall river of the ſame name, which was entirely frozen, as was alſo one that we had juſt paſſed.

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000 We ſlept at this village, and ſpent a conſiderable part of the next day there, from the apprehenſion of a hurricane, which, it was ſaid, threatened us. We were at laſt relieved from our fears, and though it was tolerably late when we reſolved to proceed, we reached Drannki, which is thirty werſts. The ſituation of this oſtrog is ſimilar to the preceding one. Here we found M. Haus, a Ruſſian officer: he came from Tiguil, and brought M. Kaſloff various objects of natural hiſtory.

133 We left Drannki at break of day. In the afternoon we croſſed a bay that was fifteen werſts wide, and from twenty-five to thirty deep; the entrance was ſcarcely leſs than five werſts: it is formed by the ſouth coaſt. This coaſt is low land, gradually declining as it advances into the ſea. The bay runs weſt-north-weſt and eaſt-ſouth-eaſt. It appeared to me that weſt-north-weſt of its entrance, towards Karagui, veſ-

ſels

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133 ſels may ſafely anchor, and be ſheltered from the ſouth, the weſt, and the north winds: The ſouth of its entrance does not afford ſo good a harbour, as it is ſaid to have various ſand banks; I was obliged to truſt to report, the ice and the ſnow preventing me from obtaining any better information.

361 We travelled this day ſeventy werſts, and
631 came in the evening to Karagui, which is upon an eminence, and affords a view of the ſea. It has only three yourts and twelve balagans, at the foot of which the river Karaga paſſes. This river pours itſelf into the ſea at the diſtance of a few gun ſhots from the oſtrog, which is the laſt in the diſtrict of Kamtſchatka; a hamlet a hundred werſts farther, and containing but few Kamtſchadales, not being included within its limits.

As we were obliged to wait here for a

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000 ſtock of dried fiſh, not yet come up, and intended for the nouriſhment of our dogs in the deſerts, which we are now to traverſe, I ſhall embrace this opportunity of tranſcribing various notes made in this and the preceding villages. They will not be placed in the ſame order as they were written; it muſt be ſuppoſed that the rapidity with which we travelled, frequently left me no choice in this reſpect *.

342 I ſhall firſt ſpeak of the yourts, which I have not yet deſcribed, deſerving as they are of particular attention. Theſe ſtrange houſes are ſunk in the earth, as I before obſerved, and the top, which appears above

* I ſhall be cenſured perhaps for making my narrative abound with dry and uniform details. I would willingly ſpare the reader in this reſpect, if I had not promiſed to obſerve the utmoſt accuracy. Let him conſider the objects with which I am ſurrounded in the immenſe extent of country that I travel, and he will perceive that they are almoſt always the ſame. Does it then depend upon me to vary my deſcriptions, and avoid tautology?

ground,

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342 ground, is like a truncated cone. To
354 form a juſt idea of them, we muſt conceive of a large ſquare hole about twelve or fourteen yards in diameter, and eight feet deep; the four ſides are lined with joiſts or boards, and the interſtices of theſe walls are filled up with earth, ſtraw, or dried graſs, and ſtones. In the bottom of this hole various poſts are fixed, that ſupport the croſs beams upon which the roof reſts. The roof begins upon a level with the ground, and riſes four feet above it; it is two feet thick, has a very gradual ſlope, and is made of the ſame materials as the walls. Towards the top is a ſquare opening, about four feet long and three wide, which ſerves as a paſſage for the ſmoke * and an entrance to the

* There is ſuch a continual ſmoke in theſe ſubterraneous habitations, that the opening in the roof is not ſufficient to let it out, and there is therefore in an unoccupied corner of the yourt, behind the fire-place, a kind of vent-hole in an oblique direction. It is called *joupann*; it terminates without, at a little diſtance from the ſquare opening, and is commonly cloſed up with a mat or ſtraw covering.

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342 yourt, where the women as well as the
men go in and out by means of a ladder,
or notched beam, that is raiſed to a level
with this opening. There is another very
low entrance in one ſide of the yourt, but
it is conſidered as a kind of diſgrace to
351 make uſe of it. I ſhall terminate the de-
ſcription of the exterior part of theſe habi-
tations by adding, that they are ſurrounded
with tolerably high paliſades, doubtleſs as
a protection againſt the gales of wind, or
falls of ſnow; it is ſaid, however, that theſe
enclofures formerly ſerved as ramparts to
defend theſe people againſt their enemies.

342 We have no ſooner deſcended theſe ſavage
352 abodes, than we wiſh ourſelves out again;
the view and the ſmell are equally offenſive.
The interior part conſiſts of one entire
room, about ten feet high. A bench, five
feet wide, and covered with various ſkins,
half worn out, extends all round it. This
bench

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

* Some of the yourts which I ſaw were floored with planks; but this is regarded as a luxury, and the generality have no other floor than the ground.

corner

353 corner of the apartment * a wretched image
of ſome ſaint, ſhining with greaſe and
blackened with ſmoke. It is before theſe
images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper
or iron; but they are all diſguſtingly filthy.
The remains of their dried fiſh are ſcattered
about the room, and the women or the
children are continually broiling pieces of
ſalmon ſkin, which is one of their favourite
meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs.
It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

291 ſingle deer ſkin, that covers and ſits cloſe to
824 every part of the body, ſo that the children
854 ſeem to be entirely ſewed up. An opening at the bottom, before and behind, affords an opportunity of cleaning them. This opening is covered with another piece of ſkin, which may be faſtened and lifted up at pleaſure; it ſupports a tuft of moſs *, placed like a clout between the legs of the child, and which is renewed as often as it becomes neceſſary. Beſides the common ſleeves, there are two others hanging to the garment to place the arms of the child in when it is cold; the extremities are ſewed up, and the ſleeves lined on the inſide with moſs. There is alſo a hood fitted to it, made of the ſame materials as the reſt of the dreſs; but in yourts the heads of the children are almoſt always bare, and the hood hangs therefore upon their ſhoulders. Beſide all this,

* They make uſe of the herb called *tonnchitcha* for the ſame purpoſe.

they

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291 they have a deer ſkin girt, which ſerves as a
854 ſaſh. The women carry their children on their back by means of a ſtring, which paſſes round the forehead of the mother and under the buttocks of the child.

171 The toyon of Karagui, at whoſe houſe we
622 lodged, was an old rebel. It was with ſome difficulty he had been brought back to his duty, and he gave us ſome uneaſineſs by his poſitive refuſal to procure us fiſh.

The manners of the inhabitants of this oſtrog are very ſimilar to thoſe of the neighbouring Koriacs. This analogy is as conſpicuous in their idiom as in the dreſs of their children. I had an opportunity of remarking it the day after our arrival.

Underſtanding that there were two hordes of rein deer Koriacs at no great diſtance, we ſent immediately a meſſenger to them to

requeſt

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000 ſky ſeemed to threaten us with a ſecond tempeſt before the end of the day. It began to riſe about two o'clock in the afternoon, and laſted till the evening.

535 To divert our attention, it was propoſed to us to try the abilities of a celebrated female dancer, who was a Kamtſchadale, and lived in this oſtrog. The encomiums beſtowed upon her excited our curioſity, and we ſent for her; but either from caprice or ill humour ſhe refuſed to dance, and paid no regard to our invitation. It was in vain they repreſented that her refuſal was diſreſpectful to the governor general; no conſideration could induce her to comply. Fortunately we had ſome brandy by us, and a bumper or two ſeemed to effect a change in her inclinations. At the ſame time a Kamtſchadale, at our requeſt, began to dance before her, challenging her by his voice and geſtures. Gradually her eyes ſparkled, her coun-

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535 countenance became convulſive, and her whole frame ſhook upon the bench where ſhe ſat. To the enticements and ſhrill ſong of the dancer, ſhe anſwered in ſimilar accents, beating time with her head, which turned in every direction. The movements became at laſt ſo rapid, that, no longer able to contain herſelf, ſhe darted from her ſeat, and in turn defied her man by cries and diſtortions ſtill more extravagant. It is not eaſy to expreſs the abſurdity of the dance. All her limbs ſeemed to be disjointed; ſhe moved them with equal ſtrength and agility; ſhe tore her cloaths, and fixed her hands to her boſom with a kind of rage as if ſhe would tear it alſo. Theſe ſingular tranſports were accompanied with ſtill more ſingular poſtures; and in ſhort, it was no longer a woman, but a fury. In her blind frenzy ſhe would have ruſhed into the fire that was kindled in the middle of the room, if her huſband had not taken the precau-

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535 tion of placing a bench before it to prevent her: during the whole dance indeed he took care to keep himſelf cloſe to her. When he ſaw that her head was perfectly gone, that ſhe ſtaggered on all ſides, and could no longer ſupport herſelf without laying hold of her fellow dancer, he took her in his arms and placed her upon a bench, where ſhe fell, like an inanimate clod, without conſciouſneſs, and out of breath. She continued five minutes in this ſituation. Meanwhile the Kamtſchadale, proud of his triumph, continued to dance and to ſing. Recovering from her ſwoon, the woman heard him, and ſuddenly, in ſpite of her weakneſs, ſhe raiſed herſelf up, uttered ſome inarticulate ſounds, and would have begun again this labourous conteſt. Her huſband kept her back, and interceded for her; but the conqueror, believing himſelf to be indefatigable, continued his jeers and bantering, and we were obliged to exert our authority

to

535 to quiet him. In ſpite of the praiſes that were laviſhed upon the talents of theſe actors, the ſcene, I confeſs, afforded me no amuſement, but on the contrary, conſiderable diſguſt

276 All the inhabitants of this place, women as well as men, ſmoke and chew tobacco. By a refinement that I cannot account for, they mix aſhes with the tobacco to make it ſtronger. We gave them ſome ſnuff, and they applied it not to their noſe, but to their mouth. I examined their pipes: they are of the ſame ſhape as thoſe of the Chineſe, made of bone, and very ſmall. When they make uſe of them, they do not emit the ſmoke from their mouth, but ſwallow it with great gratification.

000 All the toyons of the different oſtrogs we had paſſed in coming from Ozernoi, out of reſpect to M. Kaſloff, had eſcorted us as far

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000 far as Karagui. The ſecond day after our arrival, they had taken their leave of us to return to their reſpective habitations. Their adieux were affectionate. After making new apologies for not having been able to give him a better reception in the courſe of his journey, they ſhowed the utmoſt regret at leaving him, as if he had been ſurrounded by the moſt imminent dangers, and offered him whatever they poſſeſſed, ignorant of any other way of teſtifying their attachment. They addreſſed themſelves in like manner to me, and ſolicited me with earneſtneſs to receive ſomething from them. It was uſeleſs to make objections; my refuſals only rendered them the more urgent, and to ſatisfy them I was obliged to accept their preſents.

Let me be permitted in this place to perform a duty which I owe to the Kamtſchadales

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dales in general, for the civility with which
157 they treated me. I have already mentioned
609 their mild and hospitable character, but I have not been sufficiently minute respecting the instances of regard which these good people gave me, and I recall with pleasure the rememberance of their kind reception. There was not, I believe, an individual chief of any ostrog, that did not make me some trifling present. Sometimes it was a sable or fox skin, and sometimes fruit or fish, and such other objects as they conceived would be most agreeable to me. One would have supposed that they had resolved, by their attentions to me, to repair the injustice which they had so long committed against the French name. They often thanked me for having undeceived them upon the subject; and sometimes again were tempted to regret it, when they considered that they should see me no more, and that it seldom

609 happened that any of my countrymen viſited their peninſula.

We left Karagui at one o'clock in the morning of 2 March. The weather was tolerably calm, and continued ſo during the whole day. The only inconvenience we met with, was the not being able to croſs, as we had hoped to do, a bay which the tempeſt of the preceding evening had cleared of its ice: we were obliged to go round it. This bay has conſiderable depth, is eight or ten werſts wide, and appeared to run in the direction of north-eaſt and ſouth-weſt. The ice was only broken up as far as the mouth, where it became ſolid again, and extended into the ſea. With the circuit which we were obliged to make, we travelled this day about fifty werſts.

Upon the approach of night, we ſtopped in

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600 and mixed with rice and oatmeal. It was prepared in half an hour, and in the following manner. He took a piece of beef, or flesh of rein deer, and put it into boiling water, having first cut it into very thin slices, which were ready in an instant.

The evening previous to our departure from Karagui, we had killed and begun upon our second deer. We regaled ourselves with the marrow: raw or dressed, I thought it excellent. We had the tongue also boiled, and I conceived that I had never eaten any thing more delicious.

We pursued our journey early in the morning, but it was impossible to travel more than thirty-five wersts. The wind had changed to the west and south-west; it blew with extreme violence, and beat the snow in our faces. Our guides suffered extremely, less however than our dogs, some

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000 the ſame manner as the preceding, we purſued our journey at three o'clock in the
103 morning. We quitted not the ſea coaſt
361 till we came to Gavenki, which was about ten o'clock. The name of the village is derived from the word *gavna*, which ſignifies excrement; and it is ſo called on account of its deformity and wretched ſtate. There are in reality but two iſbas falling to ruin, and ſix balagans very ill conſtructed of bad and crooked wood, which the ſea leaves ſometimes upon the ſhore; for there is not a tree in the whole neighbourhood, and nothing to be ſeen but a few paltry ſhrubs ſcattered here and there at a conſiderable diſtance from one another. I was not aſtoniſhed to learn, that not along ago, more than twenty of the inhabitants voluntarily abandoned their country to ſeek out a better abode. At preſent the population of this hamlet does not exceed five families, including that of the toyon, and two Kamtſchadales

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 ſchadales from the iſland of Karagui, who are ſettled there. No reaſon was aſſigned for this removal, and I doubt whether they have gained by the change.

000 We had not been an hour at Gavenki, when a deſpute aroſe between a ſergeant of our company, and two peaſants of the village, to whom he had applied for wood. They anſwered bluntly that they would not give him any. From one thing to another the quarrel became violent. The Kamtſchadales, little intimidated by the threats of the ſergeant, drew their knives * and fell upon him; but they were immediately diſarmed by two of our ſoldiers. As ſoon as M. Kaſloff was informed of this violence, he ordered that the guilty ſhould be puniſhed as an example. They were brought before the yourt in which we were,

* Theſe knives are about two feet long; they are worn in their girdle, and hang upon the thigh.

and

17: Heizer--421 E-3 (no date)1943 Kamchadal-1-4
116, 225, 278

"Steller [CMC: G.W. Steller. Beschreibung von dem Lande Kamtschatka. Frankfurt and Leipzig] (1774, pp. 98, 103, ftn. (a)) has left the best description of Kamchadal whaling: (2)

2. The accounts of Asiatic whaling by Tooke[CMC: W. Tooke, View of the Russian Empire during the Reign of Catherine the Second and to the Close of the Eighteenth Century, 3 vols. Dublin] (1801, vol. 3, pp.18-20) and Krashenninikov[CMC: S. P. Krashenninikov. The History of Kamtschatka and the Kurilski Islands, with the countries adjacent, James Grieve. Gloucester](1764, pp. 138-139) are similar to Steller's fuller description, which I offer here in translation from the German edition.

Whales are also taken in the neighborhood of Kamtschatka in the number of ways which I shall cite here, however inconceivable such seem and are astonishing in view of(the size of) these great sea animals. Around Lapatka (3) and the

3. Cape Lopatka, the southernmost tip of the Kamchatka Peninsula.

Kurile Islands the inhabitants travel into the sea in baidars, (4) seek places at

4. This word ordinarily refers to skin-covered boats; here it means wooden boats with dugout hulls and built-up side planks (cf. Torii, [CMC: R. Torii. Les Ainous des Iles Kouriles. Journ. Coll. Sci. Tokyo Imperial University, vol. 42] 1919, pp. 178-183).

which these are accustomed to sleep; as many animals as they meet, so many do they shoot with poisoned arrows, whereby they suddenly puff out (become animated?) storm and rage frightfully and go (down) into (sound) the sea, and it happens now and then, that one or more, at times even none of them, are cast upon the shore. When the Kuriles obrain a whale, (5) no one begins to cut it up until all are

5. Presumably this refers to the moment when the whale, previously attacked, has come ashore as already described by Steller.

assembled; first shamanizing takes place, each one puts on his best clothes, and carries home his portion, after this one yurt entertains the other. Before and after the entertainment they give their dance, and otherwise delight themselves in all sorts

of ways, which will be treated in what follows.

As soon as a whale comes to the land in Kamchatka, they fasten it with a thin line to a little stick stuck in the sand, and believe certainly on this account, that neither the spirits nor the sea nor Gamuti, or spirits of the land, can any longer have any claim to it.

Further descriptions of the Kamchadal whale fishery are passing references, (6) or

6. Steller, 1774, pp. 100, 103, ftn (a); Krashenninikov, 1764, p. 141. Von Langsdorff [CMC: G.H. von Langsdorff, Voyages and Travels in Various parts of the World, during the years 1803...1807, London] (1813, p. 262) and Petroff [CMC: Ivan Petroff. Report on the Population, Industries and Resources of Alaska. U.S. Department of the Interior, Bureau of the Census](1884, p. 146) deny Kamchadal whaling. By Von Langsdorff's time the practice may have been forgotten.

are seemingly traceable to Steller's original account.

Whaling in the Kurile Islands between Yezo and the Kamchatka peninsula is recorded, but not described adequately. Krashenninikov says (1764, p. 138; see also Steller,

1774, p. 98) the 'Kuriles (kill whales) by throwing poison darts into them.' The same author (7) notes that the southern Kurilians (i.e., Ainu) feed on whale'fat. Shelekhoff

7. Krashenninikov, 1764, p. 39. La Pérouse, [CMC: J.F.G. de La Pérouse. A Voyage round the World, performed in the years 1785, 1786, 1787, 1788 by the Boussole and Astrolabe, 2 vols. London] 1799, pp. 59-60, 75. Drift whales cast ashore on Etorup are mentioned in Neue Beschreibung, [CMC: Neue Beschreibing der Kurilischen Inseln, in P.S. Pallas, Neue Nordische Beytrage, vol. II, St. Petersburg and Leipzig] 1782 p. 134.

[CMC: G. Shelekhoff. Voyages of G. Shelekhoff, from the Year 1783 to 1790, St. Petersburg. MS translation by Ivan Petroff in Bancroft Library, University of California, Berkeley](1812, vol. 1, p. 128) states that the Japenese receive whale oil from the Matmai Kuriltze. (8)

8. The Kurile Islands, except the two northernmost opposite Cape Lopatka, were occupied by Ainu. These two northern islands, Paramushir and Shumshiri, were inhabited by Kamchadal. There are a few slight indications that others of the Kurile Islands may have been occupied by Kanchadal, or, at any rate, strongly culturally influenced from Kamchatka."

17: Heizer--445 E-3 (no date) 1943 Kamchadal-1-2
116, 225, 278

"Steller (1774, pp. 235-236, ftn. a) says of the southern Kamchadal, [CMC: The following quote from Steller given in German in the text: 'Nonetheless such were very much feared because they (i.e. the Kamchadal) poisoned them by gluing on powder from the root of the Napelli (Aconitum napellus?) which in Russian is called Ludik.] Shelekhoff (75) says, ' Paramushir Island has a plant called Liutik, with the roots of which the na-

75. Shelekhoff, 1812, vol1, p. 90. Neue Beschreibung...1782, p. 118. Paramushir was occupied by Kamchadal. In fact, at least the two northernmost islands of the Kurile chain (Paramushir and Sumshiri), and perhaps still others, were not held by Ainu, but by Kamchadal. This implies Ainu-Kamchadal contacts and probable cultural interchange. We know, for example, they both hunted whales in the same manner.

tives paint themselves and into its juice they dip the points of their arrows, to kill animals.' Krashenninikov's statement (1764, p. 42) about 'poisonous herbs, whose roots are as yellow as saffron and as thick as rhubarb, and are well known to the inhabitants of the first Kurilskoy island...' may refer to the same plant. Lewin(76)identified the

76. Lewin, [CMC: L. Lewin. Die Pfeilgifte. Leipzig.] 1923, pp. 174-175.

'zgate' spoken of by Krashenninikov (77) as Anemone ranunculoides. Thus, there seems

77. Krashenninikov, 1764, pp. 92-93.

to be not a single clear reference to aconite poison from Kamchatka, but of Anemone. There can be little doubt but that this poison extracted from roots is related to the high development in the area to the south and southeast."

"Four Years Ago the Library [CMC: i. e., the New York Public Library] acquired the Aleutian manuscript texts recorded by the late Waldemar Jochelson when he headed the ethnological section of the scientific expedition sent by the Russian Geographical Society to the Aleutian Island and Kamchatka. With the assistants Jochelson reached the peninsula in the summer of 1910 and spent the following winter studying the language and culture of the aborigines, the Kamchadals, or, as they call themselves, Itelmens (='men'). He recorded a number of texts in Kamchadal and wrote several papers on the Kamchatka and its natives, which have remained largely unpublished. Last year all these manuscripts came into the possession of the Library.

Texts in Kamchadal

The studies, 129 typewritten pages in all, are couched in rather bad English. They include some notes on the geography and history of the region, but have to do chiefly with the Kamchadals, their social institutions, folklore and shamanism, as well as the various elements of their material culture, such as occupations, crafts, dwellings, food, clothes, harness, tools, weapons, armor. There are also some observations on Kamchadal diseases and folk medicine. The papers are somewhat disjointed and repetitious and give the impression of preliminary notes for a monograph. They are supplemented by some fifty photographs, presumably taken

during the expedition of 1910-11 and intended to illustrate the work that Jochelson had in preparation. They depict aborigines: men, women and children, separately and in groups, as well as landscapes, village streets, homes, dogs, products of native crafts. Three of these photographs are reproduced herewith.

Jochelson's studies include some linguistic material: a few observations on the Russian dialect spoken by the natives, a list of Itelmen terms of kinship, paradigms of Itelmen nouns, pronouns and verbs, and a sketch of the phonology of the language."

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i.e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya.. s.v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenan anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

"This circumstance lends particular interest to the Itelmen texts which are part of the newly acquired manuscript collection. There are in all forty-one of them. With the exception of one item - a brief account of a trip from one village to another by a native, apparently an informant of Jochelson's, they are in the nature of folk tales. The texts, in the original Kamchadal, all typewritten, are provided with an interlinear literal translation, in Jochelson's hand, and with a free rendering, both in an English of sorts. The free translation is often abridged. The editing of the texts must have been carried out by the Russian ethnographer in this country, where he settled in 1922. (1)

1. A group of Kamchadal tales was recorded about 1900 by another Russian ethnographer, Waldemar Bogoras, while he was doing field work in North-Eastern Siberia as a member of the Jesup North Pacific Expedition. He placed these texts at the disposal of Jochelson, who published a free English rendering of nine of them in his monumental monograph on the Koryaks (American Museum of Natural History. Memoirs, v.10, Leiden-New York, 1908, p. 327-340). The whereabouts of the original texts is unknown. Some of these tales are variants of the stories recorded by Jochelson. The text of one Kamchadal tale, with a word-for-word Russian translation is appended to S.N. Stebnitzki's Itelmen grammar [CMC: Itel'menskiĭ yazyk. (Institut

narodov Severa, Leningrad. Nauchno-issledovatel'skaya assotziatziya. Trudy po lingvistike. Moskva, 1934. 4°. t. 3, p. 85-104)]

Below [CMC: see category 539] are given versions of three of the more attractive folk tales. The translation is based on Jochelson's word-for-word rendering. This occasionally fails to convey a satisfactory meaning, and the present writer, while seeking to adhere to the original as closely as possible, felt justified in deviating from Jochelson's interpretations."

18: Yarmolinsky--4-6 L-4 (no date) 1947 Kamchadal--1-5
116, 539

"A Tale about Geese (2)

2. For a variant of this tale see American Museum of Natural History. Memoirs, v. 10, p. 335.

There was once a gander who lived with his wife. They laid eggs, from which goslings were hatched. One of them had no wings. Autumn came and it grew cold. Other geese were flying south. The gander and his wife began to think: 'How shall we take our wingless child with us?' They shed tears. But it grew very cold. One night the gander and his wife departed, leaving behind the wingless gosling who was asleep.

At dawn the gosling woke up and [finding himself alone,] cried:

'My father and mother are gone.'

Then it began to sing [wail?]

'My mother, my mother has abandoned me, the wingless gosling.' [5]

The gander and his wife heard the child wailing. They shed tears afresh, and returned. Their hearts were aching for their child and they wondered how they could take it with them on their journey. But it was getting colder and colder. And so one night they flew away again, leaving the wingless gosling behind. When the

gosling woke up at dawn, it wailed:

'My mother, my mother has abandoned me, the wingless gosling.'

A fox who happened to pass by heard the gosling lament. He approached the gosling and invited him to stay with him.

'Come with me, 'he said,' I will take care of you.'

The gosling replied:

'No, fox, I will not come to stay with you. You will eat me up.'

'No, I am not going to eat you up.'

But the gosling would not go with the fox.

The fox got angry and said:

'When the pond freezes and you have nothing to eat, I will come and eat you up anyhow.' And he went away.

The gosling started to wail:

'My mother, my mother has abandoned me, the wingless gosling, and now I shall freeze in the pond.'

He kept on swimming in the pond [and wailing]. Sinañewt (3) was passing by

3. A female character figuring in many of the Kamchadal tales - the daughter of Kutq (Raven).

and heard someone wailing. The sound was so sad that she started to cry. Then she saw the gosling swimming in the pond. She made beautiful scoops [nests?] out of grass, and went up to the pond and asked the gosling to go with her.

'Come with me, 'she said,' you will freeze here.'

Finally the gosling agreed. She put him into a nest and carried him home with her. There she dug out a pond and stocked it with fish. In that pond the gosling passed the winter.

Then spring came. Sinañewt made a pair of wings for the gosling and fastened them on him. The gosling flew off and after a while came back. Sinañewt asked him:

'Well, how are the wings?'

'They are not bad. I flew quite a distance.'

The next day Sinañewt made another pair of wings and fastened them on the gosling. Again he flew off and, after a while, came back.

'Well, how are these wings?' Sinañewt asked.

'They are pretty good; I flew a long way.' [6]

Then Sinañewt made a third pair of wings and again sent the gosling out to try them. He flew off and when he came back she asked him:

'Well, how are the wings?'

'They are very good, as though they grew on me.'

Sinañewt then said:

'Well, now go and meet your father and mother.'

And the gosling flew off to meet his father and mother. He came upon some goslings and asked them:

'Where are my father and mother?'

'They are flying just behind us,' was the answer.

Then he met his father and mother. They sat down.

'Where are you bound for?' they asked him.

'To meet you.'

'To whom then do you belong?'

'I am your child.'

'You are deceiving us. Our wingless child we left behind.' And the parents began to cry. The gosling said:

'I will tell you about me. Last year you left me behind on the pond. There I stayed and wailed. At first a fox came along. He invited me to go with him. Later Sinañewt came and took me home with her. There I passed the winter. She took good care of me and made me a pair of wings.'

The gander and his wife were happy.

'Well,' they said, 'let us go.'

They went to the home of Sinañewt. The oldest son of the two geese married Sinañewt. They all rejoiced and from that time on they lived happily lacking for nothing."

"Buried Alive.

Once there lived a man called Kutq with his wife, Miti. They had a son, Ememqut, and a daughter, Sinañewt. Ememqut lived by himself, and his father did not get enough to eat [?]. One day Kutq said to his wife:

'Miti, my time is near. Tomorrow I shall die. Make all preparations. Get some fat and meat from Ememqut, and you supply kiprei (4) and a basket of shiksha (5)

4. A plant: Epilobium angustifolium (willow herb).

5. Empetrum nigrum.

berries. Put into the grave a bowl, a mixing spoon, a pestle, a bucket of water, some firewood, a stone lamp, and start a fire there.'

Miti started preparations for Kutq's journey.

'Kutq, you are lying,' said Miti. 'You are not going to die.'

'Yes, I am, Miti,' retorted Kutq. 'It is true.' [7]

Miti started cooking the meat, making tolkusha (6) and other foods to put in her

6. A native dish regarded as a dainty, which is made by pounding fat

with several ingredients, including berries and the roots of sarana [Polygonum viviparum]. 'The tolkusha prepared with reindeer fat tastes well,' writes Jochelson in one of the unpublished studies mentioned above, 'but one cannot say the same of tolkusha with seal's fat.'

husband's grave. Then Kutq had a hearty meal, washed himself, and sat down. The whole family looked at him. Suddenly Kutq opened his eyes wide and dropped dead. The family took fright. Ememqut dug a large grave and covered it with boards. They took Kutq from the house into the courtyard and carried him to the grave. Sirim (7) noticed

7. In another tale she figures as a daughter of Kutq and Miti.

that the dead man was smiling and she smiled, too.

'Look,' she said, 'Kutq is smiling.'

'Dont you tell lies,' said Miti. How can a dead man smile?

Kutq was laid in the grave together with much food. When it turned dark, Kutq lit his lamp, started a fire and began to pound tolkusha. Sirim, going out of the house, noticed a light in Kutq's grave and heard the noise of pounding. She returned to the house and said:

'Miti, there is a light in Kutq's grave and there is a noise coming from it as of someone pounding tolkusha.

'Why tell lies?' said Miti. 'How can a dead man pound tolkusha? You are crazy.'

Kutq continued to stay in his grave and have hearty meals. When the food gave out, he left the pit and made for home. When they saw him coming, the family took fright.

'Don't be afraid,' said Kutq, 'I came alive again. I was not admitted to the other world. Miti, call the children together.'

When all the family was gathered together, Kutq said:

'Ememqut, God commanded you to feed me well, to honor me, and he desires us to live together.'

Ememqut began to feed his father well and to honor him, and Kutq ceased to be in need and he had plenty of everything."

"Kuskl'naqu and the Crab (8)

8. For a variant of this tale see American Museum of Natural History. Memoirs, v.10, p.334.

Once there lived a man called Kuskl'naqu. He decided to go out to the promontory. On the way he met a crab, and said to him:

'Little crab, take me on your shoulders and carry me.' [8]

'When do you want to be carried?' asked the crab. 'I will not sleep anymore now; I will carry you.'

Kuskl'naqu then sang the following song:

'Crab, crab, wake up and carry me.'

'Very well, Kuskl'naqu, come on, I'll take you on my shoulders and carry you.'

He carried him toward the sea and kept on going a long time.

'Well, crab, 'said Kuskl'naqu, 'you've carried me far enough. If you carry me any farther, you will drown me in the sea. Enough!'

'Well' said the crab, 'you kept me from sleeping and ordered me to carry you. So now, stay where you are.'

Then Kuskl'naqu sank to the bottom of the sea. There he found a house with people

in it. They received him well , seated him and fed him dried meat and other good things. He became very thirsty, but the people hid all the water and the water vessels and went to sleep, making believe they did not know that Kuskl'naqu was thirsty. At night Kuskl'naqu woke up and started to look for water, but could not find any.

'Girls,' he cried, 'wake up, dear girls, I am thirsty!'

But they pretended to be fast asleep.

'Sisters,' they said to each other, 'let us look at him at least with one eye. He is thirsty.'

Then he made his way to the river but found that the river had dried up.

'Well,' he exclaimed, 'what have the girls done with the water? Where is it? Why is the earth dry?'

Then he started back to the house. When he got there he sat down and said he would give his family for a glimpse of water. [?]. He spoke of his Miti [his wife?] looking at herself in a bucket of water and of his Anaráql'ñawt [his daughter?] combing her hair, using water as a mirror. At last he spoke of his pretty daughter Sinañewt, who was looking at her face in another bucket. [The people listened to him, making believe they were asleep.]

Presently they all woke up.

'Oh, grandfather, you are thirsty,' they said; 'girls, hurry up and fetch him a drink.'

Kuskl'naqu emptied the bucket that was brought to him. Then he made for the river and bowed down to drink the water from the river. He emptied the whole river. Then he died."

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PREFACE.

122 A FEW words are perhaps necessary by way of introduction to the following pages.

The *Marchesa*, an auxiliary screw schooner yacht of 420 tons, Mr. C. T. Kettlewell captain and owner, was commissioned in the Clyde in November, 1881, and left Cowes on the 8th of January following. She reached Colombo April 24th, having touched at Socotra and Oolegaum Island, one of the Maldive group, on her way from Aden. From Ceylon she proceeded *viâ* Singapore to Formosa and the Liu-kiu Islands, and thence to Japan. She left Yokohama for Kamschatka July 29th, returning thither from the north on the 6th of October. On the second visit to Japan four months were spent in the country, and the yacht then proceeded for a six weeks' cruise in Chinese waters. Leaving Hongkong at the end of March, 1883, some weeks were devoted to exploring the little-known islands of the Sulu Archipelago, and to visiting the territory of the North Borneo Company. The *Marchesa* then returned to Singapore to take in stores, and proceeded *viâ* Sumbawa, Celebes, and various other islands of the Malay Archipelago to New Guinea. In her homeward voyage she again visited the Straits Settlements and Ceylon, and calling at Bombay, finally reached Southampton April 14th, 1884.

000 To such countries as Ceylon and Japan, and others which lie in the beaten path of the tourist round the world, I have not thought it necessary to allude, confining myself entirely to an

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000 On the afternoon of August 4th, we weighed and left the port of Hakodadi in Yezo, northward-bound for Kamschatka. We dipped our farewells to old friends of H.M.S. *Champion* and *Zephyr*, and steamed out against a fresh easterly breeze. As we proceeded the wind increased, and the weather became so thick that we resolved on running in under the lee of Cape Siwokubi, and anchoring for the night. Next morning it was clear, though still blowing strong from E.S.E.; but as we were anxious to lose no time, we put the ship under fore and aft canvas, and beat under steam and sail past Cape Yerimo, the southern point of Yezo, into the open sea. The Kurosiwo or Japanese current—the Pacific homologue of the Gulf Stream—widening as it passes the eastern coast of Japan, runs northward as far as Kamschatka, and it is to its warmth that the comparative freedom from ice of that coast is supposed to be due. Between it and the Kurile Islands is a narrow counter-current of cold water, running to the S.W. With the intention of avoiding the latter, and obtaining what advantages we could from the Kurosiwo, we resolved on shaping our course so as to keep at a uniform distance of about a hundred and fifty miles to the eastward of the Kuriles, where the current is supposed to be strongest. The result, however, was a failure. For the first two days we experienced a north-easterly set, but we had no sooner got fairly out into the presumed middle of the Kurosiwo than we encountered a southerly current. At the same time we entered the region of fog, which, during the summer, is an almost constant phenomenon of the northern part of the North Pacific. This fog apparently formed a stratum of no great depth, for, although thick enough all round us, it was often sufficiently clear overhead to enable us to get a glimpse of the sky, and although morning sights were impossible, we were always able to get a meridian or ex-meridian observation for our latitude.

133 Navigation in these lonely and misty seas presents but few points of interest even to the sailor, and it was accordingly with no little pleasure that, on the morning of the 13th of August, we

22: Guillemard T-2 (1882) 1886 Kamchadal

133 emerged from the fog much as a train runs out of a tunnel, and found that Kamschatka was in sight. The sharp peak of the Vilutchinska volcano enabled us to make out our position, and we steered north for Avatcha Bay. It was a magnificent morning, and as the yacht rolled heavily over a dark blue sea, on whose surface the waves broke in patches of snowy whiteness, now plunging her bows deep into the water with all the sense of pure physical enjoyment of a living creature, now shaking herself free and pouring the seas in bright streams from her scuppers, she formed a picture which might have aroused the admiration of even the most apathetic of landsmen, and one which was provided with a fitting background. Rarely have I seen a wilder-looking coast than that of south-eastern Kamschatka. The brilliant sunshine which poured upon rock and headland redeemed it from gloom, but the wildness and desolation of the scene was indescribable. Precipitous cliffs, at the foot of which none but a bird could land; deep valleys running down to the sea at whose mouths still lay the accumulated masses of last winter's snows; pinnacle rocks like rows of iron teeth shown to warn off any one rash enough to contemplate a landing,—this was what met our gaze as we anxiously scanned the coast with our glasses. Beyond, the land rose in abrupt humps and irregular masses, and appeared to be clothed with a uniform growth of low, but dense underwood, above which the distant cones of snow stood out clear and hard against the sky. It was an impracticable-looking country enough, but we had visited it with the firm intention of going through it, and experience in other lands having taught us how often difficulties disappear upon a closer acquaintance, we did not allow ourselves to feel discouraged. An hour or two later we arrived at the narrow entrance of Avatcha Bay, and shaped our course over a smooth sea for the little harbour of Petropaulovsky.

Avatcha Bay is one of the finest harbours in the world, if not actually the finest. Rio and Sydney have no mean claims for this position of honour, but those of us who had seen both were

133 unanimous in awarding the palm to their Kamschatkan rival. A nearly circular basin of some nine miles in diameter, and with a narrow entrance opening to the S.S.E., it is roomy enough to accommodate the navies of the world. It is entirely free from dangers, has an even depth of ten or twelve fathoms, and owing to its affording excellent holding ground and being well protected from all winds, it is perfectly safe in all weathers. But the ordinary traveller will be struck not so much with its nautical excellencies, as with the superb scenery with which it is surrounded. To the south rises the Vilutchinska volcano, now quiescent, a graceful cone of about 7000 feet; and a little farther eastwards a huge flat-topped mass, exceeding it in height by a thousand feet or more, obtrudes itself as a rare exception to the rule of cone-shaped mountains which seems to obtain throughout the country. It is nameless in the charts, for we are in the land of volcanoes, and it is only 8000 feet in height! On either hand on entering are the two secondary harbours Rakova and Tareinska—the latter nearly five miles in length—and within them again are others on a still smaller scale. Nature here at least has treated the mariner right royally. The iron-bound coast without may be as bad a lee shore as any skipper need wish to see, and the Pacific Ocean may too often belie its name, but here he can rest quietly, and sleep *sur les deux oreilles* until such time as he weighs anchor for the homeward voyage.

But if the southern part of the bay is fine, it is difficult to find words to describe the beauty of its upper portion. We look north, and the scenery on which we have just turned our backs is forgotten, for there, shoulder to shoulder, their vast fields of snow glittering in the sun, stand a trio of volcanoes such as one rarely sees. From the summit of Avatchinska, the centre peak, a delicate streamer of white vapour floats out horizontally, sharply defined against the blue of the clear northern sky. So closely do these mountains seem to hedge in the bay, that it is hard to realise the fact that they are twenty miles distant. But in Kamschatka the

22: Guillemard T-2 (1882) 1886 Kamchadal

133 scenery is on a large scale, and a reference to the chart explains the matter in five figures.[1]

Mr. Frederick Whymper, in his "Travel and Adventure in the Territory of Alaska," has given an excellent illustration of this group of mountains. Koriatska, to the north and west, stands alone. Avatchinska and Kozelska are somewhat less lofty, the former being close upon nine thousand feet; while the latter is, according to different observers, either 5328 or 9054 feet[2] in height. Such a discrepancy can only be accounted for by the supposition that Avatchinska should be credited with the latter figures. During Mr. Whymper's visit in 1865, Koriatska alone emitted smoke, the others being apparently extinct; but in the month of June, ten years previously, Mr. Tronson found Kozelska in action, sending forth dense volumes of smoke, and covering the surface of the water with ashes.[3] Since then there do not appear to have been any eruptions, and in spite of the white pennant floating at the peak, the grand old mountain looks calm and peaceful enough, guarding the lonely stretches of forest and tûndra at its base.

000 It is only with an effort that one withdraws one's gaze from the exquisite beauty of mountains such as these. What is it that influences us so deeply in the sight of those eternal snows? In what lies that wondrous charm that we experience only in the regions of the north? After many years of travel I think that there is one scene which has, perhaps, remained more vividly stamped upon my memory than any other—a placid river in northern Lapland, down whose stream I floated, drinking in the perfect beauties of the changing autumn. Amid all the mass of scarlet and gold that hung above the mirror-like surface of the water not a single leaf was stirring,—not a sound was to be heard.

[1] The height of Koriatska is 11,554 feet.

[2] Tronson,—"Voyage of the *Barracouta*," p. 109.

[3] From the fact that Mr. Tronson appeared to consider Avatchinska and Koriatska as one and the same mountain, and gave an erroneous height for Kozelska, it seems far more probable that it was the first-named volcano that was really in eruption at the time of his visit.

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Before us lay the peaks of dazzling snow, and it seemed as though all Nature were hushed and worshipping at that throne of spotless purity.

Rest and purity then—the unattainable, in other words—in these lie the charm. The fairest tropic scene holds no deeper meanings such as these. Beauty of form there doubtless is, a far greater beauty perhaps than that of northern climes, but, after all, it is but soulless. The teeming life of a tropic forest, the marvellous wealth of vegetation, the reckless sacrifice of the weakest, produce

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WHISKERED PUFFIN. (*Lunda cirrhata.*)

upon the mind the same effect as do the streets of a crowded city. No grandeur of "calm decay," no pathos of the changing seasons is here. It is a fierce struggle for existence, fatal to any except the most purely material thought.

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The shores of Avatcha Bay extend to the traveller a more smiling welcome than the iron-bound coast outside. Here, the lower hills slope gently down to beaches dotted with driftwood, or, covered with birch and heather, steeply overhang the sea. Behind they are backed by higher ranges clothed with undergrowth, and rising to the height of fifteen hundred feet or more. To the north-west only is this basin-like appearance broken, where the small

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133 Paraminka and Avatcha rivers have formed a delta with innumer-
137 able mouths. Low ground also intervenes between the three great volcanoes and the bay, but the height of the mountains annihilates
136 the distance. Hardly a sign of human habitation is to be seen, but the calm surface of the water is broken by quantities of water-fowl, whose nesting-places are the steep rocks at the entrance of the bay. Most noticeable among them are the Whiskered Puffins (*Lunda cirrhata*), and the still quainter-looking Tufted Auks. The little

TUFTED AUK. (*Simorhynchus cristatellus.*)

133 village of Petropaulovsky is invisible, hidden behind a steep promontory forming the western boundary of its harbour. What an admirable harbour it is from a sailor's point of view can best be seen by a glance at the engraving. From the end of this promontory a shoal extends nearly to the other shore, but leaves a channel deep enough for ships of the largest draught. Within this again a sand-spit,—so straight, so narrow, and so regular in form, that it is hard to believe that it does not owe its existence to the hand of man,—runs out from the opposite shore to within a stone's throw
000 of the promontory. We steam in steadily towards the land; to an

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000 onlooker it would seem as if we were deliberately beaching the vessel. "Starboard! hard a-starboard!" comes the order. "'Ard a-starboard," echoes the man at the wheel. "Hard a-port!" "'Ard a-port it is," he sings out, clawing the wheel towards him with foot and hand. "Well! I'm blessed if ever I see the likes of this 'ere place," I hear Jack mutter as we are safely berthed, and, on the whole, I am very much inclined to agree with him.

505 Our arrival created no little excitement among the inhabitants of this remote little spot: it might possibly have created even more had we not entered the harbour almost at the moment of departure of the yearly fur steamer for Japan *viâ* Okhotsk. All Petropaulovsky had assembled to wave their adieux, and not a few of them appeared torn by the conflicting desires of seeing the last of their friends and of discovering the business of the new-comers.

161 The steamer was hardly under way before we were receiving our
361 visitors. They were but limited in number. Petropaulovsky, in spite of the imposing letters to which it is treated in the maps, is,
342 after all, little more than a hamlet, and is probably stationary, if not actually decreasing, with regard to population. Clerke, in 1779, found the settlement consisting of thirty huts built upon the sand-spit to which I have already alluded, and consisting mostly of yourts or balagans.[1] Captain Cochrane, who in 1821 performed the unprecedented feat of walking across Siberia from Russia to Kamschatka, describes it as having increased to fifty-seven buildings, some of which were on the mainland; and at the period of the Crimean war it appears to have been as large as it is at the present time, if not actually larger. The town had been transferred to the head of the little harbour, where it now stands, and boasted of no less than two hundred edifices of all kinds. But in Kamschatka, as in other northern countries, winter storehouses, fish-drying sheds, and other out-buildings are so numerous, that the actual dwelling-

[1] A yourt is a semi-subterranean winter dwelling, roofed with turf. The balagans are only used in summer: they are rough wooden buildings erected on piles. The upper part serves as the dwelling-house, while, beneath, the salmon are hung up in rows to dry.

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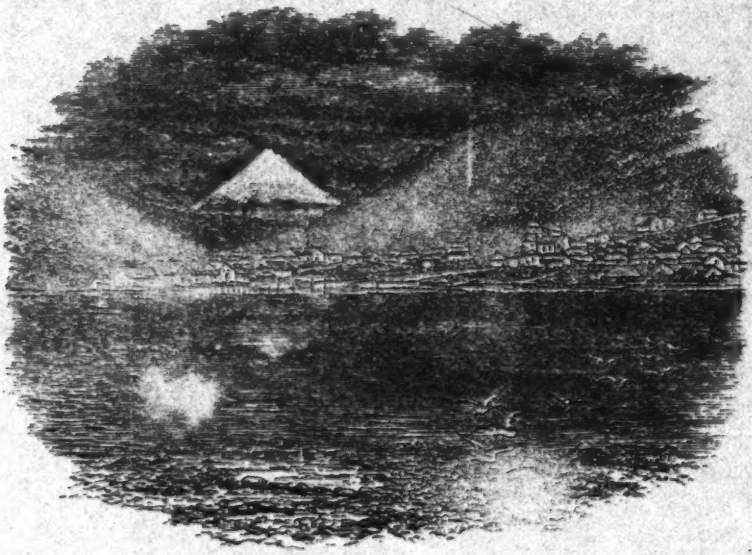
361 houses may be reckoned at about one-third of that number. Kittlitz,
161 in 1829, found the settlement to number about two hundred inhabitants, and at the time of our visit we were informed that there were over three hundred; a number that I should myself be inclined to think overstated.

133 Standing on the now deserted sand-spit,—the natural break-
361 water of the harbour,—the view of the little town and its surround-



PETROPAULOVSKY HARBOUR.

ings is strikingly picturesque. To the left is the wooded promontory, the scene of the unfortunate disaster which occurred to the forces of the Allied Fleet in 1854. On the right a hill of some fifteen hundred feet dominates the town, whose log huts are clustered around the shores of the little bay. Here and there a white-painted house of greater pretension strikes the eye, and a stunted grove of trees shelters the church, and the graveyard studded with Russian crosses. Behind the town, artistically filling in the gap

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippens and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

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Every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

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211 There are no roads even in the little settlement itself, and,
361 from the irregular distribution of the houses, and the equally
363 irregular ground on which they are built, the traveller has to
493 pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the celebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lesseps's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

[Petropavlovsk--Analyst]

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175 town so insignificant, we could hope to gain no sympathy at the hands of other nations. The whole story was related to us by Captain Hunter, who was himself an eye-witness of the occurrence, but the details have been so clearly and concisely given by Mr. Whymper in his "Travel and Adventure in the Territory of Alaska," that I make no apology for quoting his account.

"In the autumn of 1854 (28th August[1]) six vessels of war—French and English, comprising the *President*, *Virago*, *Pique*, *La Forte*, *L'Eurydice*, and *Obligado*—arrived off Avatcha Bay: a gun, placed near the lighthouse at the entrance, was fired by the Russians, and gave the inhabitants of Petropaulovsky notice to be on the alert. Admiral Price immediately reconnoitred the harbour and town, and placed the *Virago* in position at a range of two thousand yards.

"The Russians were by no means unprepared. Two of their vessels, the *Aurora* and *Dwina*, defended the harbour, and a chain crossing the narrow entrance shut it in. There were seven batteries and earthworks, mounting about fifty guns of fair calibre.

"The *Virago* commenced the action with a well-directed fire, and several of the batteries were either temporarily or entirely disabled. The one farthest from the town on the western side was taken by a body of marines landed for the purpose. The guns were spiked. There were three batteries outside and on the spit, two at the termination of the promontory on the western side of the harbour, and one in a gorge of the same which opens on Avatcha Bay. It is in this little valley that the monument to La Perouse stands.

"The town was well defended both by nature and art. The hills shut it in so completely that it was apparently only vulnerable at the rear. There a small valley opened out into a flat strip of land immediately bordering the bay, and, although there was a battery on it, it seemed an excellent spot to land troops.

"Our vessels having taken up a new position, and silenced the batteries commanding it, seven hundred marines and sailors were put ashore. Half of them were English, half French; a large number of officers accompanied them, while they had for guides two Americans, said to know the ground. They appear to have expected a very easy victory, and hurried in a detached and straggling style in the direction of the town, instead of proceeding in compact form, in military order. A number of bushes and

[1] This date does not agree with that on the monument, where it is given as the 20th-24th August.

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175 small trees existed, and still exist, on the hill-sides surrounding this spot; and behind them were posted Cossack sharpshooters, who fired into our men, and either from skill or accident, picked off nearly every officer. The men, not seeing their enemy, and having lost their leaders, became panic-struck, and fell back in disorder. A retreat was sounded, but the men struggling in the bushes and underbrush (and in truth, most of them, being sailors, were out of their element on land), became much scattered, and it was generally believed that many were killed by the random shots of their companions. A number fled up a hill at the rear of the town. Their foes pursued and pressed upon them, and many were killed by falling over the steep cliff in which the hill terminates.

"The inhabitants—astonished at their own prowess, and knowing that they could not hold the town against a more vigorous attack—were preparing to vacate it, when the fleet weighed anchor and set sail, and no more was seen of them that year."

The actual number that fell in this engagement is uncertain. In the "Nautical Magazine" for October, 1855, it is stated that we lost 107 killed and wounded, but we were told that the total number of French and English who fell was 170 men. Under the hill at the back of the town still stands a rude enclosure, whose dilapidated white palings surround three crosses, beneath which Russians, French, and English lie side by side. Others were buried where they fell. The bodies of some of the officers were borne from the field by the Allied Forces, and interred at the entrance of the Tareinaka Harbour on the opposite side of Avatcha Bay. They lie on a small promontory on the land side, opposite a little island. We had hoped to visit the spot, but the limited time we had at our disposal, and the preparations necessary for our expedition through the interior, prevented us. We were told that, in the spring of the preceding year, a party, of which our informant formed one, had searched in vain for the graves, in spite of that of the English admiral having been marked by a cross. The death of this officer is by the inhabitants of Petropaulovsky attributed indirectly to the result of the engagement. As a matter of fact, it occurred, I believe, upon the preceding day; the troops during the affair being under the command of the French admiral.

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175 In the opinion of those who had been in Petropaulovsky at the time, the disaster was chiefly due to the division of the forces on landing,—one body getting ahead of, and being fired into by the other. The thickness of the bush prevented a recognition of this error, and the attacking party imagined themselves taken in rear. The Cossacks took advantage of the mistake, and before long the Allies were in a state of confusion which the nature of the ground rendered hopeless. More met their death by being driven over the precipice, it was said, than actually fell before the rifles of the Cossacks.

The victors were left in peace for the time being, but, in the spring of the following year, the Allied Squadron once more made its appearance. The *President*, *Pique*, *Dido*, *Brisk*, *Encounter*, and *Barracouta*, together with the French frigate *Alceste*, assembled off Kamschatka, and entered Avatcha Bay on the 31st May, 1855. They found the town completely deserted by the Russians. Three foreign residents alone remained, and from them they learned that the settlement had been evacuated by order of the Emperor upon the breaking up of the ice. Even the natives had fled. On the 7th June the batteries and magazines, which had been strengthened and increased in number since the engagement in the preceding year, were blown up, and two days later all the Government buildings were burnt to the ground. The latter proceeding was, in all probability, the wanton act of some English blue-jackets, and was done without the knowledge of our authorities. It was an unfortunate occurrence, the explanation of which could hardly be expected to be believed by the Russians, and the affair still rankles in the breast of the inhabitants of the little settlement.

A few days later the Squadron left, and the inhabitants returned to their homes. Poor little Petropaulovsky has to rest content on her honours of 1854, for the town has never been re-fortified, and is now no longer a military post.

231 One cannot be long in Kamschatka without making the
492 acquaintance of that very necessary animal, the sledge-dog. When

231 the fact is taken into consideration, that for every inhabitant of the
492 peninsula there are at least five or six of these animals, it will be understood that the effect produced is hardly inferior to that exhibited by the streets of Constantinople. "A dog's life" is a phrase which is here most appropriately realised. No comfortable homes are provided for them to enable them to withstand the rigours of the arctic climate, and the poor beast, except when actually at work, has in most cases to "find himself." Long experience, and the instinct transmitted to him by his ancestors, has, however, given him all the resources of an old campaigner. Stumbling at night about the uncertain paths of the settlements, the traveller is not unfrequently precipitated into the huge rabbit-burrows which the animal constructs to avoid the cutting winds. His coat, nearly as thick as that of a bear, is composed of fur rather than hair. As for his manners, they are, like those of the midshipman's savage, almost non-existent. He has thoroughly grasped the fact that self-preservation is the first law of Nature, and does not scruple to act upon it, in its widest meaning, upon every occasion. Wonderfully well-trained, cunning, and enduring, he is at the same time often obstinate and unmanageable to a degree, and is apparently indifferent to the kicks and blows so liberally showered upon him by his master. Excepting in settlements where neighbouring stretches of *tundra* render the use of sledges possible in summer, he has a long holiday during that season. During this time he wanders over the country at will, sometimes returning at night to his burrow, at others being absent for days together. A good hunter and fisherman, he supports himself upon the game and salmon he catches, and it is but rarely that he deserts his master for good. But the inhabitants have to pay a good price for
231 his services. Owing to his rapacity, it is impossible to keep sheep,
136 goats, or any of the smaller domestic animals, and Kamschatka is one of the few countries in the world in which fowls are unknown.[1]

[1] In Petropaulovsky this loss is partially made up for by large quantities of sea-birds' eggs brought from Okhotsk, and the islands at the mouth of Avatcha Bay.

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231 *Rien n'est sacré pour un sapeur.* Raw hides, boots, and even babies,
136 it is said, occasionally vary his diet!

To our ship's crew Petropaulovsky appeared little less than a paradise. The bright sunny weather and clear cold nights were a pleasant change after the heat of the tropics, and the forecastle mess was furnished with many unaccustomed delicacies. The
136 harbour and rivers teemed with fish; periwinkles *à discretion* were
137 to be had for the picking, and milk and bilberries were abundant. The whiting and herrings were, however, left in comparative peace, owing to the ease with which salmon were to be obtained at the mouths of the Avatcha and Paraminka rivers. On one occasion no less than three hundred of these fish were obtained at one haul of the seine, and the crew occupied themselves in salting, smoking,
000 and otherwise preserving the spoil. Jack was in his element, and doubtless would not have objected to passing the rest of his life in such a fascinating spot. Our shooting excursions to various parts of the bay were much enjoyed by the boats' crews, and the forward part of the ship began ere long to be ornamented with bearskins that the men had obtained by purchase or barter from the natives. Meanwhile we had been making arrangements with the Ispravnik, and the individual I have before mentioned under the title of the King of Kamschatka, for the ponies that were necessary for the first part of our journey; but, as there was some delay in getting
133 together the requisite number, a party of us started to visit the hot springs of Kluchi,[1] which lie some few miles from the shore on the other side of the bay. Excepting during strong south-easterly winds, which send a somewhat heavy swell into the entrance, the passage across is generally pleasant enough even in small boats. Though blocked with ice in the winter, the bay is, we understood, but rarely frozen right across, although the harbour of Petropaulovsky is, of course, closed for some months. Landing in a bay north-west of the entrance to Tareinska Harbour, we passed through an extensive birch-forest, and emerged at length on the shores of a

[1] Kluchi, I believe, is the Russian word for springs.

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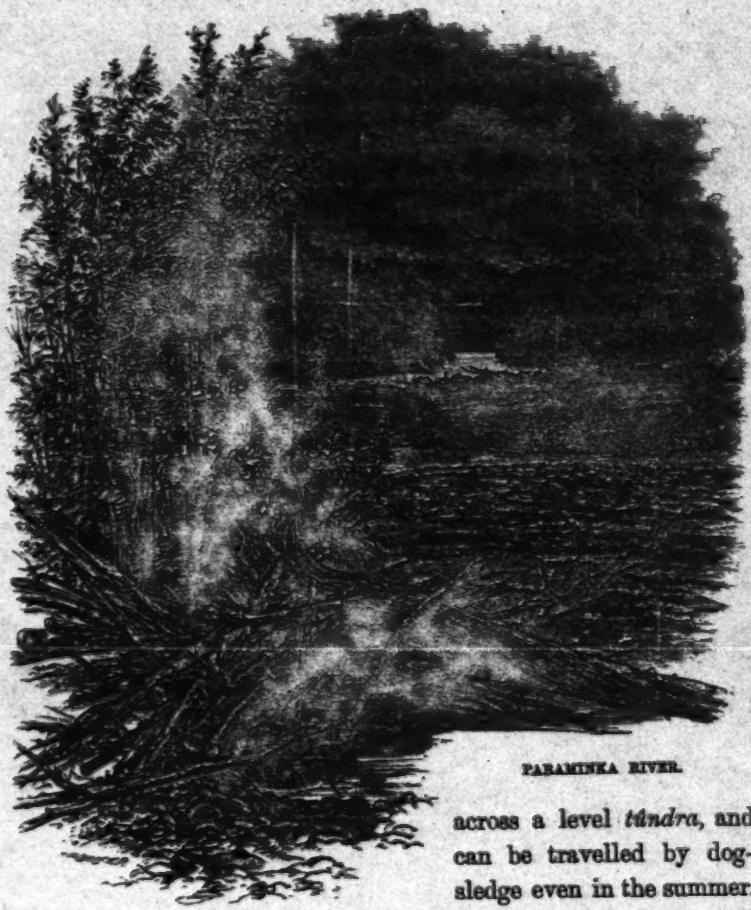
picturesque lake, across which we were conveyed in dug-out canoes to a small village on the opposite shore. From here the road lies



PARAMINKA RIVER.

across a level *tundra*, and can be travelled by dog-sledge even in the summer. Kluchi itself is a small village composed of a few log-built huts and balagans, but, with its background of the Vilutchinska volcano, is prettily situated. It stands in an open valley, in which some attempts at cultivation are made. The hot springs—the steam from which is visible at some

133 distance—have a temperature of about 108° Fahr., and appear to be
515 nearly devoid of sulphur. They are much resorted to by the natives
757 for cutaneous and other disorders, and have huts built over them for bathing purposes, thanks to the orders of the Ispravnik. Near the village runs a branch of the Avatcha River, down which our party paddled to the sea; and on arriving at the yacht we were pleased to learn that most of the horses had been brought into the settlement, and that there was every prospect of our starting on our long-planned expedition through the interior in the course of a couple of days.

CHAPTER V.

000 KAMSCHATKA—(*continued*).

We begin our journey—Stampede of the packhorses—The effects of vodki—Staricstrog—Salmon à *discretion*—Large birches—More stampedes—The fur-trade—Prices of skins—On the *tundras*—Narchiki—Enormous abundance of salmon—Mortality among the fish—A Kamschatkan interior—*Ovis nivicola*—Hot springs—Uses of the birch-tree—Kamschatkan ponies—Gunal—Balagans—Sledge-dogs—An Indian summer.

122 EARLY on the morning of August 19th we rowed ashore with a somewhat formidable amount of baggage, and found the horses awaiting us. Of these there were sixteen; and four little foals, engaged in capering round their mothers, were, we learnt, also to join the expedition. This number, owing to our numerous *personnel*, was hardly sufficient, but as we had requisitioned almost all the available cattle in the neighbourhood of Petropaulovsky, we decided to make a start with them, trusting to be able to pick up others at the little village of Avatcha, about twelve versts distant.[1] Our party were ten in number, our three selves with two servants forming the yacht contingent. These latter were old campaigners. Louis, who had served in the Franco-Prussian War, and had been in the army before Paris in the terrible winter of 1870-71, had done much travelling in his master's service and elsewhere, and was without exception the very best servant I ever saw. Spiridione Zembi, a Maltese Greek, our cook, deserves no less praise. Master alike of his profession and of many languages, he contrived to

[1] A verst is two-thirds of an English mile.

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122 produce dinners under the most trying circumstances which would not have disgraced the table of an alderman. European servants are, in rough travel, by no means always an unmixed good, and it is pleasant therefore to have to record an instance to the contrary. Nor were we much less fortunate in our two guides. Both were old sable-hunters and good backwoodsmen. Jacof Ivanovitch was a solemn, but good-humoured Siberian Russian, who knew the country well; and Afanasi Waren, in whom there was more than a suspicion of English blood, spoke our language very fairly. The latter was a jovial soul with a merry eye, and if report ran true, a great lady-killer. Under the sobriquet of "Half-nasty" he afterwards became an equally great favourite with our crew. Our complement was made up with three half-breed natives, in charge of the packhorses, in whose favour there is but little to say. Of the misdeeds of one of them, whom, from his partiality for the liquor of the country, we afterwards nicknamed Vodki, I shall have more to say in the sequel. Lazy, untruthful, and apt brutally to ill-treat their horses whenever we were not at hand to interfere, they caused the only trouble we had during the first part of our journey. The inhabitants of the river settlements that we were destined to meet with later were, however, as will be seen, far worse; and in comparison with them, our horseboys came afterwards to be regarded in a far more favourable light than they really deserved.

AFANASI WAREN.

492 The pack-saddles used throughout the country are of an excellent pattern, and owing to the hooks with which they are provided, the necessity for the many lashings which are so in-

492 convenient in this kind of travelling is avoided. A thick layer of bearskin was placed over the saddle-cloth, and effectually prevented sore backs. Our personal gear, enclosed in bags made from the skin of the hair-seal, was easily adjusted, but the photographic apparatus and other breakable objects required more care and time,
133 and it was noon before we were fairly off. We bade adieu to our
487 friends, and passed out through the narrow gap at the back of the village towards a small lake of brackish water which hems it in to the north. Here at one time stood the hospital mentioned in Captain Cook's "Voyages," but no trace of the building now remains. Circumventing the lake, we struck off to the north-west and, before long, the track, which had never been very well marked, became obliterated. Our path led through a rough but picturesque country, dotted here and there with stunted birches, and we steered across it for a certain point in the landscape recognised by our guides. By our side trotted one of the most ornamental members of the expedition, whom I have hitherto neglected to introduce—Verglaski, a magnificent bear-dog belonging to Jacof, of an aspect almost as solemn as his master. Our horses had hitherto gone fairly well, but during a short halt that we made to adjust some of the packs a stampede occurred, and in an instant the scene was changed to one of the wildest confusion. Kicking, plunging, colliding against trees, and dashing wildly in all directions, it was not long before the horses succeeded in disembarrassing themselves of their loads, and the ground presented the appearance of having been recently passed by a beaten army in full retreat. The horseboys, more than half drunk, pursued the fugitives, cursing volubly in Russian and Kamschatdale; while we, to whom these little unpleasantnesses of packhorse travel had not even the merit of novelty, lit our pipes resignedly and proceeded to gather up the fragments. It was a full hour ere we were again *en route*. These incidents, "tedious as a twice-told tale," and trying alike to the temper and the baggage, recurred again and again. We progressed, as it were, by a series of stampedes, and our horseboys became almost as erratic in their locomotion as their charges.
[of Petropavlovsk--Analyst]

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locomotion as their charges. At this rate of advance our journey's end seemed distant indeed. We pressed on, however, as well as we could, and crossed a small plain from which the base of the Avatchinska group of volcanoes was visible to our right. Their summits were hidden in thick mist, and the weather, which had hitherto been fine, now looked most threatening. Arriving at a small stream, Vodki and his two companions halted, and declaring that there was no water farther on, proceeded to unload the horses. This we soon put a stop to, and telling them that, water or no water, we had no intention whatever of camping for another hour or more, we resumed our journey. The scenery now changed, and we entered a gloomy birch-forest with much thick undergrowth. This was in places six or eight feet, or more, in height, and was composed of coarse grass and giant umbelliferæ, with an occasional blue monkshood, varied in the more open parts with large patches of yellowing bracken. Before long we reached another stream, and were thus enabled to prove the truth of our surmises; but it was not till some time later that we finally halted for the night, the horseboys being by this time scarcely in a condition to proceed farther. We were glad to pitch camp and get a rest, as it had already begun to rain. Before turning in we succeeded in finding Vodki's brandy bottle, but it was perfectly empty. The man had disposed of a pint or more of raw spirit since leaving the settlement!

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In this kind of travel movement is not very rapid for the first day or two until every one has shaken down to his work, and on the following morning we were nearly three hours in getting breakfast and striking camp. The horseboys were depressed and inclined to be penitent. If, like an old Kafir servant of mine, they estimated the amount of enjoyment of the previous night by the strength of the morning's headache, they ought, to all appearances, to have been well pleased. We had decided to leave Avatcha on our left, and to make for Stari-ostrog,[1] a small village a little higher up the Avatcha River, and forty versts from Petropaulovsky.

[1] The *ostrogs*, or small forts, were erected by the Russians in bygone days as a protection against the natives at the time of the first settlement of the country. The name now alone remains, all traces of fortification having long since disappeared.

136 Avatcha River, and forty versts from Petropaulovsky. We passed
137 through the same monotonous forests of birch as before, which, like
487 those of other northern countries, seemed singularly devoid of animal life. An occasional coal tit, which from its note and habits appeared identical with the tame little freebooter of our own gardens, or the tapping of a woodpecker,[1] alone broke the almost death-like stillness which reigned around. We had struck a well-marked trail, and progressed in Indian file, the packhorses (tied in fours, each to the tail of the one in front) leading the way, and relieving the monotony by an occasional breakdown or a stampede.
231 Almost all these ponies are strong and well shaped, but from the ill-treatment they receive at the hands of their masters, have learned to bite, kick, and shy on all occasions, together with other accomplishments of like nature which were somewhat apt to dis-
000 turb our equilibrium. There was but one saddle among us, and the "Kamschatkan Peats," as we named the combination of pillow and pack-saddle which we used as a substitute, though comfortable enough when we ambled along quietly, were apt to become slightly insecure when, as a naval member of our party expressed it, we "made bad weather."

The path between Stari-ostrog and Petropaulovsky appears to be tolerably well-travelled, to judge from the frequency with which we came across the marks of old camping-grounds, but we met with no one on our way. It was afternoon when we reached the river, and crossing a small affluent, found ourselves opposite the village. We had ridden on ahead, and were hailing the natives for canoes in which to cross, when a tremendous clattering in our rear caused us to turn, and we beheld the cook's horse advancing in full stampede, but minus his rider. Beneath his belly a large canteen swung violently from side to side, half-open, and discharging a shower of tin cups, knives, forks, plates, tea and coffee kettles, and other articles of like nature in all directions. We retraced our steps sadly, picking up such articles as we could find, but

[1] *Picus tridactylus*, considered as a distinct species (*P. albidior*) by Dr. Stejneger.

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared
251 to be teeming with salmon. Stari-ostrog, situated on the right bank, consists of ten huts and a large number of fish-drying sheds.
262 The long Kamchatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

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563 and sour bilberries. The houses of the better class of natives are almost all log-built. They are unpainted, and the rooms, unlike those usually seen in the northern parts of Scandinavia, are generally small. Of these there are usually two—rarely or never more than four; and in most of the huts in the larger villages the floors are boarded. As is the case among other northern nations, the houses are in many places raised above the ground, either by means of a foundation of stone, or, like a haystack, by low wooden pillars at the corners. The hut is warmed by a huge brick or stone stove, generally built between the two rooms. It is supplied with fuel only once daily, and the heat thrown out is so great, and the atmosphere, owing to the hermetically-closed windows, so stuffy, as to be well-nigh insupportable to a European. The furniture is simple. A few chairs, an abundance of cockroaches and other less mentionable insects, a rough deal table, and a tawdry gilt *ikon* of the Russian Church—a sort of fetich without which no peasant would feel comfortable—is usually a tolerably full inventory. A house of this kind is, of course, only owned by what may be termed the upper classes—those of Russian blood who have migrated from Siberia. The dwellings of the half-breed Kamschatdales, which I shall presently have occasion to describe, are very different.

000 While we were superintending the passage of our horses across the river—a somewhat lengthy operation, owing to the depth of the stream necessitating the off-loading of the baggage—we were astonished at being greeted in very fair English by a long, lean cornstalk of a lad, who expressed his pleasure at meeting travellers of that nationality in his own country. He was evidently possessed of no little love of travel himself, and told us that he had been for a year as cabin-boy on board an English steamer trading between China and Japan. His advent was opportune, as through him we were able to make arrangements for three more horses, which we were to pick up on the road the following day. For these, which were to accompany us until we reached the head waters of the Kamschatka River, a distance of about three hundred versts, we

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226 In company with our English-speaking friend we went to in-
251 spect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133 It was late in the afternoon before we were again *en route*, our
137 course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usually exasperating

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000 stampede. These occurrences, though common enough during the earlier part of our journey, became less and less frequent as we advanced, and before we reached our destination had altogether ceased to trouble us. We did not regret it, for no amount of repetition accustomed us to them, and it needed an almost superhuman patience to take them philosophically. We were now passing along a fairly well-marked trail, and, a short time after we were once more in marching order, we met four miserably ragged and dirty natives who seemed to be moving house. They were mounted, and drove before them a couple of cows. We inquired if they had any furs for sale or barter, but they were unable to understand us, and thinking we wanted milk, produced a few drops of that liquid tied up in a small piece of the intestines of a recently-killed bear. This delicacy, however, we declined with thanks. A little later we came upon the new addition to our cavalcade for which we had arranged at Starigostrog—three ponies, each of which was accompanied by her foal. We formed now a party of some size, composed of eleven men and twenty-six horses, and the playful gambols of the little foals, though somewhat provocative of stampedes, served to counteract the gloom of the monotonous birch-
137 forests through which we passed. The height of the undergrowth of grass and other coarse herbage was enormous: such, indeed, as I could not have conceived possible for annuals to attain in these northern climes. In many places it was two or three feet above our heads as we rode. There was but little game to be looked for, or at least to be easily obtained, among such rank vegetation, and we pressed on without delay, as our rate of progress since leaving Petropaulovsky had been anything but satisfactory.

000 Our new horseboy, though in other ways a great improvement on his fellows, was unluckily a somewhat sleepy individual, and signalised himself during the course of the afternoon by causing the most disastrous stampede we had yet experienced. The pack-horses, as I have already mentioned, were lashed together in strings of four, the leading animal carrying a horseboy in addition to his

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000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

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We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

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In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

22: Guillemard T-2 (1832) 1886 Kamchadal

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

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435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 On the morning of August 22d we came for the first time to a
137 *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our
132 course—for we were on what a native would doubtless call the
487 "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

22: Guillemard T-2 (1882) 1886 Kamchadal

132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 We reached Narchiki early in the afternoon, and were greeted
361 by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 Narchiki is placed on a little branch of the Avatcha River,
136 which is here not more than eighteen inches deep. Standing upon
226 its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our
136 horses nearly stepped upon them. Their back fins were visible as
226 far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 could have pulled these latter out of the water with the gaff until
226 we were tired.

While we were engaged in procuring our supper by this simple method, a native came down and watched our proceedings. Taking a spear he went a little way up stream, and soon returned with half a dozen fish which were a great improvement upon our own selection,—for I can apply no better term to it. They were of three species:—one a long charr-like fish, of a brilliant salmon-colour beneath, but with the back dark green, and with a most peculiar lower jaw. This closes into a sort of groove or socket in front of the upper jaw, producing a very extraordinary under-hung appearance. Its native name is Gultsi.[1] The other fish were a grayling (*Thymallus*) somewhat like our own, but not so deep; and a species of trout with obsolete spots.

The vast quantities of salmon which fill the rivers of Kamschatka in the manner I have described cease in course of time to astonish the traveller, who goes down to hook his supper out of the stream as naturally as he gathers the firewood to boil his kettle. But to a new-comer the sight is an astounding one. The millions of fish that are caught, and form the food throughout the year of almost every living creature in the country, are, however, as nothing compared with the countless myriads that perish naturally. I had at first supposed that the rotting fish that lined the banks, and here and there lay piled in little heaps together, were the victims of some unexpected and fatal epidemic. But I soon learnt that there was nothing unusual in it, and that it was an annual phenomenon of as constant occurrence as the breaking up of the ice.

000 We entered one of the huts in order to eat our lunch and rest the horses before proceeding on our journey. It was combined with the stable, through which one had to pass before entering the only habitable room. This was tolerably clean, and boasted of a couple of chairs and a table; but we had already got beyond the region of glass, and the windows were made of strips of bear-gut

[1] *Salmo callaris*, Pall.

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000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be grown here in some abundance. Much, no doubt, might be done in
241 the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

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133 that the hand could not be borne in it. Of these, as in Japan,
515 there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet.
322 The birch is to the
824 inhabitant of northern
531 regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood

BIRCH-BARK BOX.

good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

22: Guillemard T-2 (1882) 1886 Kamchadal

322 ornamented with stamped designs, and are occasionally painted, or
531 rather dyed, with blue and white; while the oval shape so commonly seen in Scandinavia is not infrequent. To the European traveller the tree is equally useful. Cups and other articles can be made with the greatest readiness; fires can be lighted in the wettest weather with the thin inflammable bark, and the inner layers of the latter form excellent writing-paper, the characters on which no quantity of rain will injure or render illegible.

133 The scenery some miles north of Narchiki begins to alter in
136 character, an alteration that is distinctly for the better. The monotony of the birch-forests is relieved from time to time by openings where the dense undergrowth is supplanted by little rocky knolls covered with bright mosses. The ground becomes more broken and the open spaces larger, and before long the country approximates closely in character to that which, in Scandinavia, would be designated the lower fjells. We had hitherto shot but little game, but here ptarmigan were abundant,[1] and we were able with ease to secure as many as were necessary for the table. Farther on, we came to a small stream, which was, most probably, an affluent of the Great Bolcheresk River, which debouches into the Okhotsk Sea on the western coast of the peninsula. It was crowded with dead and dying fish; and the remnants of some recently devoured ones upon the bank, together with fresh spoor of bear around them, told us that, in all probability, Bruin was not far off.

I had never before seen the tracks of this animal in such abundance, but farther north it was common enough to see the river-banks as much trampled as if a herd of cattle had been driven down to water. The bears at this season of the year live entirely upon salmon. Later, when this diet fails them, they take to berries, upon which they live until the time of hybernation, which is generally

[1] Probably a sub-species of, or perhaps identical with, the Dal-ryper or Willow Grouse of Scandinavia (*Lagopus albus*). I unfortunately omitted to preserve specimens of this bird until it was too late, and we did not shoot any after we had once begun the river journey.

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136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 Our road, some time after leaving Narchiki, had led to the
137 west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature
132 of northern landscapes, we put up several coveys of ptarmigan;
136 and on the outskirts of a small wood we obtained our first
231 Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established themselves here with Kamschatdale wives in the last century.
361 The latter people are now rare as a pure race, excepting upon the
771 western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

22: Guillemard T-2 (1882) 1886 Kamchadal

They were marked by Russian crosses with a little
177 bronze or brass crucifix roughly nailed on, but there were no inscriptions of any kind.

We pitched our camp at the edge of what, in England, would have been the village-green,—a little two-acre patch of real, short English
000 turf, at a bend in the river. It was a lovely scene. In Kamchatka all the romance of life appears to have left it and gone out into its surroundings. But, however sordid and material the lives of those whose whole existence is one constant struggle against such a climate must be, there is no doubt that nature is here as prodigal of her beauty as she is in any part of the known world. Farther north, in the neighbourhood of the huge volcanoes whose very names are unknown to the vast majority of Englishmen, the scenery is of unsurpassed magnificence. Here it was of a far less

VILLAGE OF GUNAL.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun, —a speck of steely blue against the snow beyond.

132 Gunal, with its enormous stores of salmon, seemed, like all
251 these Kamschatkan villages, a place of considerable size. A
343 nearer acquaintance, however, soon dispelled the illusion, and we
361 noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

22: Guillemard T-2 (1882) 1886 ıKamchadal

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who suffer from a plethora of callers in our own country. I commend the suggestion to the more progressive of my readers.

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The inhabitants of the village had already begun to get in and tie up their dogs in anticipation of the coming winter. There were over two hundred of them here, and we had ample opportunity of studying their habits. Most of them are white, with

BALAGAN AND SLEDGE DOGS.

black heads, or entirely of a brown-black, and their general aspect, owing to the sharp muzzle and prick ears, is decidedly wolf-like,—an appearance that one is familiar with from the sketches of North American travellers. The only food they are provided with by their masters is salmon of the hump-backed kind—the Garbusa; but during the summer, as I have already said, they pick up game, eggs, and birds in their wanderings about the country. They are usually inspanned in teams of eight or ten, but where the sledges are heavy or the roads bad, double that number, or even more, are occasionally used. When the snow is hard and even, they will

231 draw a weight of 360 lbs. a distance of five-and-thirty or forty
492 miles with ease in a day's work; and with an unloaded sledge with a single occupant, a pace of eight versts an hour can be kept up for a considerable time. On the road they are given one-third of a fish twice during the day, and a fish and a half at night, which they wash down with a few gulps of snow. The dogs are castrated when puppies, and have their tails cut at the end of the first year. Each has a name, which he answers to when he is driven in the sledge just in the same way as a Cape ox in a waggon team, for no whips are used. If chastisement be necessary, the driver throws his stick at the delinquent, or pounds the unfortunate creature with any stone that comes handy. There are many ways of tethering these animals, all having in view the one object of keeping them apart, as, excepting upon the road, they seize every opportunity of fighting. One method—the one that obtrudes itself most upon the traveller's notice—is by making a large tripod of poles, and tying a dog at the bottom of each; and in many villages, owing to the large number of dogs which have to be kept, these tripods form a characteristic feature.

000 We had many reasons to induce us to take a couple of days' rest at Gunal. Louis was suffering from a chill consequent on the wetting of the previous day; one of us had a slight touch of fever caught some years before in Africa; and at the camp kitchen Cook sat a prisoner as a surgical patient, imperturbably smoking cigarettes and picking up Russian from Afanasi. A slight injury to the ankle, combined with mosquito bites and many hours of riding, had produced an inflamed leg,—a rather awkward accident at this juncture, as we wished to press on as rapidly as we could. In addition, the camp gear needed drying after Vodki's exploit, and as there were said to be plenty of bear in the neighbourhood, we settled to remain.

The following day was gloriously hot, and before long the camp presented the appearance of a washerwoman's drying-ground. The sun heat was, indeed, so great that we gladly took refuge in

22: Guillemard T-2 (1882) 1886 Kamchadal

The sun heat was, indeed, so great that we gladly took refuge in
132 the tent, and at noon the mercury stood at nearly 80° Fahr. in the shade. These hot days are not unusual at the end of August, and constitute a sort of Indian summer, which, as in Lapland, is but the immediate precursor of an autumn so short as hardly to be dignified by the name of a season. At sunset the temperature fell rapidly, and at night it was so cold that we were glad of four blankets, the thermometer being at or about freezing point. A range of something like fifty degrees in a single day is not often seen, but weather of an almost exactly similar kind is met with during winter on the high table-lands of Southern Africa. The Kamschatkan autumn cannot always be relied on, for, from what we could gather from the natives, it is not unfrequently attended with a very heavy rainfall, and occasionally with much wind.

136 We had hoped to find Bighorn in the mountains in the neighbourhood, but, greatly to our disappointment, the people of the village told us that these magnificent sheep never come down to the lower spurs of the range before winter, and that it was useless to go after them. This was the second time we had to give up the idea of hunting them. We were, however, more fortunate with the bears, and succeeded in bringing one to bag upon the first day after our arrival.

[of Gunal--Analyst]

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CHAPTER VI.

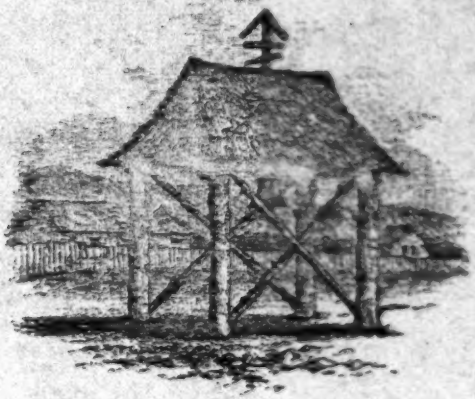
KAMSCHATKA (*continued*).

Abundance of bears—Ptarmigan—The Palæarctic region—Valley of the Bolcherek—Arrive at the Kamschatka River—Dense growth of annuals—The sable—Methods of catching it—Puschina—Kamschatkan birds—Verglaski fishes the river—Kamschatkan salmon—The Tchervitchi—Krasna—Haiko—Garbusa—Kisutchi—Gultsi—Other salmon—Habits of bears when fishing—We arrive at Sherowmy.

136 We left Gunal on the morning of August 27th. Our two days'
137 rest had done us all good, and Cook's disabled leg, which had at one time caused us some anxiety, was sufficiently well to risk going on. The injured member had not prevented his superintending the making of some most excellent bilberry jam. We had killed a fatted calf, of which, after much haggling, we had become the possessors for the sum of twelve roubles; and the carcase had been duly converted into veal and a good supply of stock. From our saddles hung several couple of mallard, and the larder on the whole was in as satisfactory a condition as it well could be. We had woke to a heavy mist, which rendered even near objects distinguishable with difficulty, but it lifted gradually under the rays of a bright sun, and before we were well off, and had turned to catch the last glimpse of the beautiful scenery around our late camp, the day had become all that the most *exigeant* of travellers could desire. Under hot suns like these the signs of autumn appear with wonderful rapidity, and we noticed that the tints were distinctly brighter than they had been but three days before.

22: Guillemard T-2 (1882) 1886 Kamchadal

133 We passed two of the level seas of marshy ground that for lack
137 of a better name I have hitherto called *tundras*. The term is, strictly speaking, applied only to the vast stretches of ground of this nature that are so wearisome to Siberian travellers. Here, however, the only difference lies in the size, and as we have no corresponding English word, I have preferred to retain the Russian name. The thick forests of birch were no longer to be seen, and the country, though still wooded, was more open, large clearings



BELFRY AT GUNAL.

being not infrequent. The familiar monkshood, too, whose spikes of flower are in Kamschatka snowy white, as well as of the ordinary shade of violet that our English gardens exhibit, had almost entirely disappeared, and we saw but little more of it during the rest of our journey. The number of bilberries was enormous, but the cranberry was much less abundant, and its berries as yet were hardly ripe.

Riding quietly along in advance of our party, we suddenly came almost upon the top of two very fine bears, with a young cub between them. We were unfortunately without our rifles at the time, and before we could get them the animals had made off,

22: Guillemard T-2 (1882) 1886 Kamchadal

133 greatly to our disgust; and, though we spent some time in following
137 them up, we did not succeed in getting sight of them again. They had doubtless got scent of us, and were far away. Bears are always much more disturbed by getting wind of human beings than by any noise the latter make, or even by their appearance; and the hunter, although his movements are by no means those of the stealthy-footed Malay, knows that unless he works to windward his trouble is in vain. The number of these creatures in Kamschatka must be enormous. Afanasi told us that there are hunters who have killed over four hundred in their lifetime, and we heard that at a little hamlet on the Bolcheresk River more than ninety had been shot and trapped during the summer. July, August, and September are the best months for them, as they haunt the river-banks at that season for the fish, and are in most excellent condition.

The heat at noon was nearly as great as it had been on the previous day, and the business of supplying our larder with ptarmigan for the many mouths we had to feed involved a very considerable amount of exertion; and, as we ploughed through the soft moss, sinking up to our knees at every step, "larding the lean earth as we walked along," it was difficult to realise that at night-
000 fall we should be back again in an Arctic climate. The birds were luckily tolerably abundant, and we had obtained a sufficient number on pitching camp for the night. Capercailzie apparently were rare. We had seen but few, and up to this period had only succeeded in obtaining one, and our game-birds were consequently limited to the Willow Grouse.

The Englishman travelling in Kamschatka who has reached his destination, not by the desert steppes of lonely Siberia, but by way of Ceylon and sweltering Singapore, where almost every bird he sees is unfamiliar to him, cannot fail to be struck, however unobservant he may be, with the resemblance of the avifauna of the new region in which he finds himself to that of his own country. He disturbs a Turnstone or a Golden Plover as he lands, perhaps,

22: Guillemard T-2 (1882) 1886 Kamchadal

000 and notices a familiar-looking wagtail running along the well-trodden paths of the settlement. Overhead, maybe, hovers some bird of prey, which he may recognise as an Osprey or a Hobby; and as he shoots his first grouse, or notes a woodpecker tapping at a tree hard by, he identifies them, or at least thinks he identifies them, with like species he has met with in his own or some Norwegian wood.

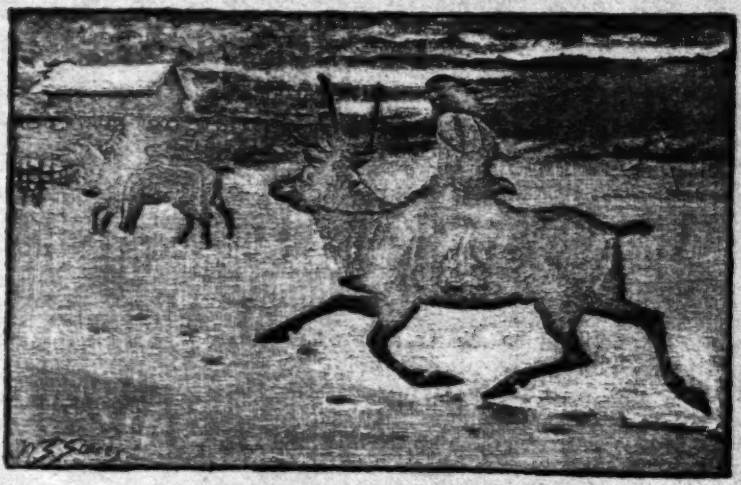
In the majority of cases he is right. In others he is, at all events, not far wrong. For, in consequence of the similarity of the fauna which extends over the whole of Europe and Northern Asia, zoologists have been led to group these countries together under the name of the Palæarctic Region, and the species which are common alike to Great Britain and Eastern Siberia are numerous.
136 Kamschatka abounds with birds of wide range with which the European traveller is quite familiar, but its peninsular position has at the same time had a certain influence towards the creation of representative forms, among which those of the Great and Lesser Spotted Woodpecker,[1] the Capercailzie, and the Marsh Tit may especially be instanced. In all these the differences consist for the most part in the greater predominance of white in the plumage, and this tendency to albidism is noticeable, as I have already mentioned, in other animals besides the birds; the dogs and horses likewise showing it in a marked degree.

000 We wasted some time of the morning of August 28th in tracking a large bear that Afanasi had wounded on the previous evening.

[1] *Picus pipra*, the eastern form of our *P. minor*, is found over the greater part of Siberia, and even in Japan. Kamschatkan individuals are noticeable as exhibiting the characteristics of the species in a more marked degree than those of the adjoining continent. In the same way the *P. major* of the peninsula differs from that of Europe, and has recently been raised to specific rank by Dr. Stejneger as *Dendrocopos purus*. It differs "in having the breast and upper abdomen very pure white, the white of the lateral rectrices without, or almost without, dark markings, and possessing a white spot on the outer web of the longest primaries near the tip." The specimens that we obtained in our journey through the country bear out this description except in the last-named particular. Both these woodpeckers were comparatively common in the country round Gunal.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 He had been hard hit, and marks of blood were plentifully visible as we took up the spoor. The vegetation was, however, so thick, and everywhere so overrun with the trail of these animals, that before long we had to give up the search, in spite of the aid of
133 Verglaski. We therefore returned, and striking camp, proceeded
136 up the valley of the Bolcheresk River, as on the previous day. The river here runs due south through a flat plain covered with yellow grass and about three or four miles in width. It is hemmed



REINDEER RIDING, KAMSCHATKA RIVER.

in by mountains which are at first of no great height, but as the head of the valley is approached the scenery becomes finer. We rode towards it under heavy rain, but before long the weather cleared, and disclosed to view a gloomy gorge on our right, about eight miles distant, from which the river evidently debouched. At the same time another valley became apparent, joining in from a north-north-westerly direction, and the stream which flowed through it appeared to have the same source as the Bolcheresk, or at least to rise at no great distance from it. We had got at last to the head waters of the Kamschatka River!

22: Guillemard T-2 (1882) 1886 Kamchadal

133 Early in the afternoon we arrived upon its banks, and it was with no little interest that we inspected the river that was to bear us some four or five hundred miles upon its bosom before we reached the sea. It was a little stream barely fifteen yards across, and not more than a foot or eighteen inches in depth. The Bolchaia-reka, which we had just left, had been teeming with fish, but here not one was to be seen, and the disgusting smell of decaying salmon that is in Kamschatka the almost invariable sign of
000 the proximity of a river, was conspicuous by its absence. In a small grove of trees close by we found two rough log-cabins, which had doubtless been the winter quarters of some sable-hunters. They were deeply sunk in the ground, and by their dilapidated condition, had evidently been built many years ago. We were not sorry to find them, as it was our intention to camp here and try for bear, and at the same time, if possible, to explore the source of the two rivers. To our great disgust, however, the presence of a kettle hanging on a stick, and the yet warm ashes of a camp-fire, spoke in unmistakeable terms of the ground having been so recently disturbed as to render our chance of sport in the immediate neighbourhood but a poor one. We accordingly pushed on, and after riding for a couple of hours, struck the river once more at a most picturesque bend in its course. The ground in the vicinity was covered with fresh bear-tracks, and thinking we could not do better, we once more prepared to camp. At this juncture Vodki appeared, and begged us to try farther on, where the ground was everything that was perfect, and the bears in incalculable multitudes. "Just one verst more, little father." For the first and only time we yielded to his advice, and resumed our march. Verst after verst was passed and still it was "one verst more." Two hours and more elapsed before we began to realise that we had been befooled. To be befooled by Vodki!—the thought was too galling. Not in the best of tempers, we altered our course for the river at once, debating what form of punishment we should adopt. Our trouble, however, was saved us. Vodki, in no better temper than we at his plans

000 having failed, kicked one of the packhorses violently in the belly while unloading it. The effect was excellent. The poor animal, who, like the Pope's mule in Daudet's charming little story, had many an old score to pay off, turned round and bit his aggressor so successfully in the face as to leave him with a portion of his cheek hanging down. Here we interfered to prevent reprisals, and while the conqueror was led off to a patch of the most succulent-looking grass we could find, Vodki retired to his tent to nurse his wound for the next two days.

133 Accustomed as we had become during the earlier part of our
137 journey to the wonderfully dense growth of the annual herbage, especially in the birch-forests and in the vicinity of the rivers, I do not think we had ever seen it in more rank luxuriance than we found it here. Our camp was pitched on a little eminence two or three hundred yards from the river, but the latter would have been almost unapproachable had it not been for the numerous bear-tracks that led in every direction through the forest of grass. As it was, the vegetation rose three or four feet above our heads, and was in places so thick that we could never be sure that our next footstep would not precipitate us into one of the hidden streams with which
000 the marshy ground abounded. In such ground shooting is almost impossible, and the only plan is to lie up in concealment on the banks of the river, on the chance of a bear coming out in the neighbourhood to fish.

We spent the remaining two or three hours of daylight in this monotonous and chilling amusement, and rose wet and stiff with cold without any success having attended us. The bears had in all probability deserted this part for some other place where fish were more numerous, and the only recent spoor we saw was that of an otter, an animal that is apparently far from common in the peninsula.

136 The following morning, since there appeared to be no fish in the river, we put our rods together and tried a fly in Kamschatkan waters for the first time. Paradoxical as it may seem, a river of

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136 this kind presents the only condition under which this sport is feasible, at least at this season. With the river choked with foul and dying fish, where every cast would foul-hook a fish that would be uneatable on landing, it is of course an impossibility. Here the stream was free from salmon, but though we hoped to obtain some trout or grayling, it seemed to be equally devoid of these also; and having spent an hour or two without getting a rise, we returned to camp. We found that one of our party who had been out after capercailzie had been fortunate enough to shoot a sable. The animal had been found by Verglaski, who had chased and treed it, and in spite of its not being, from a hunter's point of view, in full condition, it had been duly added to the bag. Our hunters told us that it was extremely rare to see sable at this time of year. The winter coat had begun to grow, and was, indeed, of tolerable
136 length and quite fast. In spring, although the winter fur may be
224 still on, the pelts are said to be quite useless, as the hair drops out even after the skin has been prepared. The animal measured twenty-seven inches in extreme length; the tail, which was not furnished with the thick brush so characteristic of the winter skins, seven inches; and the value of skin in the Petropaulovsky market was estimated by Afanasi at four roubles. The price given for winter sables is, as I have already stated, sixteen roubles.

The sable is always skinned from the tail—bag-shaped—and while performing this operation in the approved fashion of the country, we listened to a sermon on sables and sable-hunting from Afanasi. They are, he told us, for the most part of nocturnal habits, and, though they occasionally feed by day, generally spend that period of the twenty-four hours in holes at the roots, or in the trunks of trees. They dislike the presence of man, and are rarely to be found in the neighbourhood of the villages; their favourite resort being the depths of the forests least frequented by the natives. It is considered that the most inaccessible and least known parts of the country are the best hunting-grounds. They live on hares, birds of all kinds, and in short, almost any living

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136 thing they can kill, but they are also said to eat berries, and even
224 fish. There are, indeed, but few animals, apparently, which do not live on salmon in Kamschatka. They have only one litter during the year, generally in the month of April, and bring forth four or five young at a birth in a nest in the holes of trees. When the hunter is bitten for the first time by one of these animals, the bite is almost invariably followed by severe illness; but on subsequent occasions no ill effects, with the exception possibly of slight inflammation of the wound, are produced.

There are various methods employed in catching sables, but a less number are trapped now than used formerly to be the case. Dogs are almost invariably employed, to run them down in the deep snow or to tree them; and they are also smelt out by these trained animals in their holes at the roots of trees. The great object is to tree the sable if possible. The hunter then surrounds the base of the tree with nets, and either shakes down his quarry or knocks it off the boughs with sticks. If it does not fall into the net it is run down by the dogs, or compelled again to take refuge in a tree. Should the tree be too high for this method to be successful, it is cut down, or the sable is shot; but the hunters generally avoid the use of the gun if possible, as it is apt to spoil the skin.

The hunters usually start on their winter's expedition towards the end of September, if their destination be a distant one. If it be in better known country and closer at hand they wait until the first snows have fallen, and do not leave before the middle of November. They train dogs especially for the purpose, and a good sable dog is one of the most valuable of a Kamschatkan hunter's possessions. A catch of twenty sables in a season is considered exceptionally good. Jacof Ivanovitch and one of our horse-boys, in company with two other hunters, had on the preceding winter tried some new ground on the shores of the Kronotsky Lake, and had been particularly successful. Jacof had only succeeded in killing fifteen, but our horse-boy had bagged no less than forty; and the total

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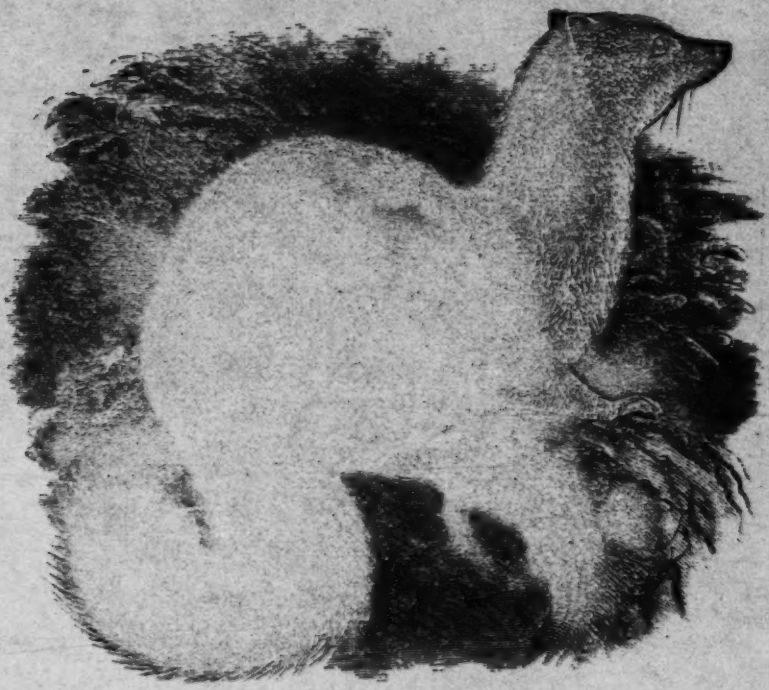
133 number killed by the party was close on one hundred and twenty
172 skins. The Kronotsky Lake, which has never yet been visited by Europeans, lies south of the great group of volcanoes at the mouth of the Kamschatka River, and some sixty miles east of Melcova.[1] It is now completely deserted by the natives, but, as far as we



SABLE.

could gather from our hunters, it has remains of ancient lake-dwellings on its shores, with deposits of shells and other objects of like nature resembling the *kjokken-möddings* of Northern Europe which, as far as I am aware, are unknown in the country at the present day.

Of the number of sables killed annually in Kamschatka it is

[1] Both Melcova and the lake are wrongly placed on the Admiralty chart; the former is nearly ninety miles north of its assigned position!

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Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

[see page 74--Analyst]

234 We rested our horses and obtained a draught of fresh milk before resuming our march, for at almost all these settlements cows are kept. The milk is generally very rich, and is one of the few luxuries the country affords the traveller, unless, indeed, the cows should happen to have been feeding on the wild garlic. What effect the diet of half-rotten fish on which the poor animals feed in winter may have, I do not know. We noticed, however, that many of the birds we shot and preserved on the expedition smelt strongly of decaying salmon.

During the land journey the actual number of species of birds we met with was but limited, although individuals of some kinds were sufficiently abundant. The Capercailzie (*Tetrao parvirostris*, Gray), though not unlike the European species with which Scotch and Norwegian sportsmen are familiar, differs from it in several particulars. It is markedly smaller in size, shows a strong tinge of grey on the upper surface, and is especially characterised by the tendency to white in the plumage. The feathers of the wing coverts and those of the prolonged upper and under tail coverts are broadly tipped with this colour, and the general appearance of the bird is very handsome. The forest districts are poor in bird-life; the woodpeckers I have before described, small flocks of buntings (*E. rustica*), bramblings, and two species of the genus *Parus* were almost the only noticeable kinds. One bird, however, which I have not yet mentioned, appeared tolerably common—the sober-coloured, but graceful dark ouzel (*Merula obscura*, Gmel.) I met with it many months later, amid very different surroundings, in the depths of a Bornean jungle. It is migratory in its habits, nesting in Siberia and passing the winter in the Malay Islands.

By the rivers there is more life. Many of the so-called sea-birds haunt the streams for a considerable distance inland, and at Stari-ostrog we found large flocks of a gull closely resembling our own Kittiwake (*Rissa tridactyla*). A graceful tern (*S. longipennis*, Nordm.) was almost equally numerous at the same place, but we did not again meet with it for some time, and on our return to Petropaulovsky it had already departed for the warmer regions of

[from Petropavlovsk to the headwaters of the Kamchatka River--Analyst]

136 the south. Corvine birds are abundant wherever there are fish, and large flocks of the common crow (*C. corone*) are always to be found perched on the trees in the vicinity of the rivers, or pecking at the piles of dead fish rotting on the banks. The familiar chatter of a magpie, which differs but slightly from our own bird, is as common a sound in Kamschatka as it is in England, and the rigours of an Arctic winter appear to have had no sobering effect upon his character.[1] Ravens too are here, and by the side of the stream runs the Wood Sandpiper (*T. glareola*), almost the only bird of this genus that we noticed on our journey. The surface of the water is dotted with various species of duck, of which mallard and teal[2] are perhaps the commonest. Like everything else, they too seem to regard the dead salmon as a source of food, for in many of those we shot the crop was full of maggots.

We halted for our mid-day meal on the banks of a little stream a few versts beyond Puschina, and while engaged in discussing our wonted dish of cold grouse a fine eagle flew over us, which we were fortunate enough to secure. It was only winged by the shot, and made such a determined resistance to our efforts to secure it, that we eventually had to give it the contents of another barrel. It proved to be a female Erne (*Haliaëtus albicilla*) in not quite mature plumage, measuring six feet eight inches across the wings. The crop contained the remains of salmon, and the bird smelt so atrociously from its prolonged fish diet, and was so fat, that the operation of skinning it was anything but a pleasant one. It was the first example we had obtained, but we afterwards found the species common towards the lower part of the Kamschatka River. The magnificent Pallas's Eagle (*Thalassaëtus pelagicus*) we did not meet with until we had reached the neighbourhood of the great volcanoes.

000 While we ate our meal we watched Verglaski, slow-moving

[1] This species is another instance of the tendency to white in the birds of this region. It has the extension of that colour on the wings characteristic of the Central Asian Magpie (*P. leucoptera*, Gould), but even more developed.

[2] The Teal were of two species—*Q. crecca*, and another, of which we did not preserve any specimens. It is, I believe, *Q. falcata* of Pallas.

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000 and solemn as ever, occupying himself in securing his own dinner. He waded leisurely into the stream, just as a bear would, and stood placidly watching the water for his prey. He was evidently an old hand at the business, and would have sniffed disdainfully at any ordinary kelt. No miserable half-dead Garbusa, such as sledge-dogs are fed on, would have contented him. As a bear-dog, he felt such diet to be beneath him, and, like a true fisherman, looked out for the clean fish. There were not many of them, although the half-rotten corpses on the bank spoke of the numbers of salmon that had at an earlier part of the year frequented the stream. I cannot hope to convey to my readers any idea of the enormous multitudes that yearly visit the rivers of Kamschatka. Krasheninikov, writing more than one hundred years ago, says, "The fish come from the sea in such numbers that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink; and at this time the bears and dogs catch more fish with their paws than people do at other places with their nets."[1] We had no opportunity of seeing the advent of the salmon, owing to the lateness of our visit; and the death of the fish is of course not due to the subsidence of the water, as he seems to imply. But that the rest of the statement is devoid of exaggeration we had abundant opportunities of proving. None of us, unfortunately, were ichthyologists, and the rapidity with which we were obliged to travel through the country, combined with difficulties of transport and the want of spirit and receptacles, prevented our preserving specimens. In the following paragraphs I have embodied my notes upon the salmon of Kamschatka with the statements we obtained from our hunters.

136 Every year the various kinds of salmon arrive at the mouths of the Kamschatkan rivers with surprising regularity. The date of the advent of these different species extends from May to mid-

[1] "The History of Kamschatka," translated by James Grieve, M.D., Gloucester, 1764, p. 143.

136 August; but each has its own time of arrival, which, from its constancy, appears to be more or less independent of seasonal influences. A few fish apparently remain at or about the river mouths during the summer, and eventually return to the sea, but these are so few as to be scarcely worthy of mention. The vast majority—practically all, in fact—ascend the streams to spawn, and, having once done so, die. In the case of some species every fish appears to perish; in others, to which I shall refer, a few get back to the sea.

The kelts of these salmon exhibit, though in a far more intensified degree, the changes that are noticeable in our own salmon after spawning. The jaws are prolonged and hooked, and the teeth much developed. The back becomes somewhat humped—in one species enormously so—and the skin of that region so hypertrophied and spongy as to conceal the scales. Simultaneously the colour of the body surface changes, becoming livid or dusky, and blotched with red patches, or even entirely red. The flesh gets paler in colour and tasteless, and the whole aspect of the fish denotes its unfitness for food. As they ascend the river the salmon keep close together in large shoals, each fish keeping to the shoal of its own species and not mingling with others. Later in the year, after spawning-time, they of course become indiscriminately mixed.

136 During our visit to, and journey through the country, we met
226 with at least six different species of the Salmonidæ in abundance.
825 That there were others I am quite sure, but in the following list I have limited myself to noticing those only about which we personally obtained information:—

1. *Oncorhynchus orientalis* (Pall.)—Known to the Kamschatkans as the Tchervitchi, this fish is the king of the Salmonidæ both as regards size and flavour. On first arrival the Tchervitchi is silvery, the back and upper surface dark, and marked with dark spots, which also extend on to the dorsal fin and tail. The fish may have a length of four feet or more, and are rather broad: their extreme

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weight was given by Afanasi as "over two pooda," which would be 72 lbs. We did not see any fish of this size, but a salmon, most probably of this species, was caught by the *Dido's* men in 1855, the weight of which is given by Tronson as 76 lbs. There is no doubt that they commonly run to as much as fifty or sixty pounds. The Tchervitchi is proper to the Kamschatka and Okhotak Seas, apparently not being found elsewhere. According to Steller, it only frequents the larger rivers, and does not exist to the north of the 56th parallel. He gives the date of its arrival as April 20th for the Kamschatka River, May 10th for the Bolchaia-reka, and June for the rivers in Avatcha Bay. According to Afanasi, it comes up the Kamschatka River "early in May," and gets out of season in July. It certainly appears, as far as we could learn from the natives, to wait for some days at the mouths of the rivers before ascending them, which it does in shoals so large that, as Pallas tells us,[1] a little wave of water is driven up in front of them.

We did not meet with the Tchervitchi until we got to the Kamschatka River in early September. The inhabitants had then long since ceased catching them, and very few remained in the river. The balagans and drying sheds were, however, full of them, and many seemed not to have been in quite clean condition at the time of catching. As a kelt, the fish becomes marked with red on the sides, producing a streaked appearance, and the rostrum becomes hooked, especially in the male, though apparently not nearly to the same extent as in the Garbusa and other species. From the time of entering the river the Tchervitchi is said by Pallas never to feed. We made no inquiries of the people as to this point, but they told us that a certain, though very small proportion of this species do not die, but manage eventually to regain the sea. The flesh is of a rather pale red in colour, and is esteemed by the natives above that of any other fish.

2. *Oncorhynchus lycaodon* (Pall.)—This salmon is known to

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 368.

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Kamschatkans[1] as the Krasnaya riba or red fish, but the name is invariably shortened to Krasna. In shape and general appearance it resembles our own salmon. On its first appearance in the rivers it is silvery, the belly white, the back dark with a bluish shade and almost without spots. In length it reaches three feet or more, and large examples would, I should think, scale over thirty pounds. It is found in the Okhotsk and Kamschatkan seas, and extends across to the American coast.[2] In the peninsula it seems to frequent large and small rivers alike, ascending the streams about the end of May or beginning of June, later than the Tchervitchi, but before

KELT OF HAIKO. (*Oncorhynchus lagocephalus.*)

the Haiko and Garbusa. Towards the end of August the Krasna is completely out of condition. It becomes a bright red all over like a gold fish, and both jaws get prolonged and hooked, while at the same time the teeth are wonderfully enlarged. None of the fish ever reach the sea after spawning—at least so we were informed by the natives;—and as this species is one of the most plentiful of all the Kamschatkan salmon, their bodies strew the banks in nearly as great numbers as the Garbusa.

3. *Oncorhynchus lagocephalus* (Pall.)—The trivial name of this fish is given by Steller[3] as Kaiko, but we found it invariably known as the Haiko. It is not unlike the preceding species (*O. lycaodon*),

[1] I have here and elsewhere used this term comprehensively as "an inhabitant of Kamschatka." It should not be confounded with Kamschatdale—the name applied to one of the original races inhabiting the peninsula

[2] Steller, "Beschreibung von dem Lande Kamtschatka."

[3] *Op. cit.* p. 157.

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the back being dark greenish, the sides silvery, and the belly white, but it differs in the greater bluntness of the rostrum and the pale colour of the flesh. It appears, as a rule, to run smaller than the Krasna: its area of distribution is said to be similar. It arrives at the mouth of the Kamschatkan rivers some little time after the Krasna and Tchervitchi, but its advent coincides more or less with the Garbusa or Hump-backed Salmon. About mid-July[1] this species ascends the streams, and is caught in great numbers. Later, the kelts show much the same changes as those of the Krasna, the jaws becoming much hooked; but they never acquire the deep and

KELT OF GARBUSA. (*Oncorhynchus proteus.*)

generally-diffused red of the latter species, that colour being usually confined to small patches on the belly and under surface. A species of bread is said by Kittlitz and others to be made of the Haiko, but we did not see it.

4. *Oncorhynchus proteus* (Pall.) is known to the inhabitants of the country as the Garbusa or Hump-back. On arrival from the sea this fish is said to be without any trace of the extraordinary development of the back from which it takes its name. It is without spots, except upon the tail—which is deeply forked—and is very silvery. It is said to frequent the rivers of the Okhotsk Sea and those of some of the Aleutian Islands, as well as Kamschatka. Roughly speaking, its length is from eighteen to twenty-four inches,

[1] I have also got "mid-June" in my notes, but I think the date given above is probably the correct one.

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and its weight seldom above fifteen pounds. As a rule it is considerably less.

The Garbusa swims up the rivers in company with the Haiko, and is the most abundant of all the Salmonidæ in Kamschatka. According to Pallas, the hump begins to appear even before the fish has spawned, and is generally supposed by the natives to result from the efforts made in ascending the stream! Its enormous development in the kelts can best be realised by reference to the annexed illustration. Both jaws become hooked at the same time, more so, perhaps, than in any other species, and in consequence, in an old kipper the mouth does not nearly close. Until the death of the fish the gibbosity increases, and the colour of the body-surface becomes more and more livid and brown, the sides and under part being irregularly blotched with blood-red. The vast majority of this species die in the month of August, and though some few live till the middle of September, the natives told us that none return to the sea. The flavour of the flesh is said to be very good when the fish first come up the river, but the Garbusa is looked upon almost as the dogs' private property, and is not much eaten by the natives. In the balagans and drying sheds it invariably occupies the lowest tier of all. The female fish is described by Pallas as much smaller than the male, and very much less numerous; the hump does not become so largely developed and the mandibular hooks are absent or slight. We did not, however, meet with many individuals agreeing with this description.

5. *Oncorhynchus sanguinolentus* (Pall.) is the Kisutchi of the Kamschatkans. The clean fish is silvery, and devoid of red colouration, despite its specific name. The dark greenish-brown back is marked with rather large black spots, and the snout is blunt, becoming afterwards developed in a most peculiar manner. Pallas says that the largest measure three feet and weigh from ten to twelve pounds,[1] but it is evident that a fish of this length would weigh considerably more. Most of those that we saw towards the

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 379.

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136 lower part of the Kamschatka averaged, I should think, about
226 twelve or fifteen pounds; the extreme weights, at a rough guess,
825 being eight and twenty-five pounds.

The Kisutchi is the last of all the salmon to ascend the rivers. It arrives about the 10th or 12th of August, and in consequence is in good condition when most of the other species are uneatable. In the middle of September we found the majority of them clean fish, and it is not till the following month that they usually acquire the blood-stained tinge of the under surface, and the extraordinary snout to which I have just alluded. The latter presents a smoothly rounded protrusion about as large as a sixpence, over-hanging the lower jaw, and giving the fish a very comical expression. We learnt from our two hunters that the Kisutchi were caught until November, and Krasheninikov tells us[1] that they are found "during the whole winter in those springs that run into the Kamschatka from the south," which is possibly due to the fact that the water of some of these streams is warm. It appears to be a generally-distributed species, occurring in all the rivers of the peninsula. The flesh is very pale, almost white.

114 6. *Salmo callaris* (Pall.) is the Goletz or Gultsi of the natives.
136 Krasheninikov says[2] that "the largest fish of this species, which
226 lives sometimes five or six years, comes from the sea into the River
825 Kamschatka, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almost as big as the *Charitsi* (Tchervitchi), though it seldom weighs more than twenty pounds. They are found likewise very large in the Bistroy River; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour,[3] have large teeth, and the lower jaw is crooked with a knob: it seems indeed of a different species. Those of three years old, which have been one year out of the sea, have a long head, are of a silver colour, with small scales, and

[1] "The History of Kamschatka," p. 148.
[2] *Op. cit.* p. 149.
[3] Steller also says, "auf dem Bauch und Flossen Zinnober-roth."

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small red spots; and such as have been two years out of the sea are round and longish, with small heads; and their flesh, which is reddish white, is hard and well tasted. With regard to their size, the first year they are long and small; the second they grow more in breadth than in length; the third the head grows considerably; and the fourth, fifth, and sixth years their breadth and thickness increases greatly: in the fourth year also the lower part to the snout becomes hooked."

Pallas adds that "these fish enter the rivers from the Eastern ocean in great numbers . . . in order to hybernate, being still without spots. They are said to remain torpid during the winter in the

GULEH (*Salmo callarias.*)

depths of rivers, in shoals of thousands, until at the return of spring they seek the sea again, from about the 10th to the 20th of May. They surmount cataracts of whatever height by leaping, and in the same manner escape from nets one fathom deep. They force their way into the Kuril Lake near the River Kamschatka,[1] notwithstanding a very high cataract, and hybernate in it in large numbers. Many remain for a long time in the rivers and lakes, but the greater number return in spring to the sea. When they come up from the sea they are without the red tint and spots, and shine with a silvery lustre; during the ascent they become gradually spotted with red, while they acquire a more or less red tint beneath the belly and on the fins, according to the comparative rapidity of the river currents."

Both the above accounts are very difficult to reconcile with that

[1] It is difficult to understand what lake is here meant. The Kuril Lake is at least 170 miles distant from the nearest point of the Kamschatka River.

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114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

000 and whether boiled or fried in steaks, the fish has a delicacy of flavour that is rarely met with at a civilised dinner-table. But, of all methods of cooking it, one is pre-eminent in its excellence. Cleaned, split, and gutted, the salmon, which should be a small one, is impaled upon a Y-shaped forked stick, and placed half over the fire, so that it may be exposed to the occasional action of both smoke and flame. A certain amount of attention is necessary to see that it does not get too much of either, and care should be taken to turn it tolerably frequently. But if properly done—and, those who have tried it will bear me out—the dish is one fit for the gods, and loses nothing from the simplicity of the necessary apparatus.

We broke camp at noon on the following day, being within easy distance of Sherowmy, where we calculated on beginning our river journey. A heavy shower fell as we were striking the tents, wetting much of our baggage and our ornithological specimens before we could get them under cover, but the weather soon cleared, and we continued our march. Our long cavalcade proceeded in Indian file over the desolate and monotonous stretches of bilberry-covered open and stunted birch-thicket,—a type of country which, however exhilarating beneath a bright sun, is depressing to a degree under grey skies and driving rain. The wind held steadily from the west, however, and having made sure of the direction in which Sherowmy lay, we left the party, and turning our horses towards the river, devoted the remainder of the day to a search for bears. We had no sooner taken up our positions by the river-side than the wind shifted, fell light, and then shifted again, and all
114 hopes of getting a shot vanished. Of there being bears in the
136 vicinity we had abundant evidence, for the banks of the river were trampled in all directions with their fresh footmarks, among which it was easy to recognise those of an old animal of great size.[1] The

[1] Some of these Kamschatkan bears are enormous. One skin in my possession measures eight feet three inches in length, in spite of the greater part of the head being wanting.

114 remains of many half-eaten fish lay on the banks. The bears are
136 said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 Sherowmy, or Sherowm,—for the Kamschatkans are fond of
144 clipping the exuberance of their words, and turn Kamakoffskaya
157 into Kamaki,—is a pretty little village of nine houses and forty-
161 three inhabitants, situated on a branch of the Kamschatka River
177 close to its junction with the latter. To the south lie a few acres
361 of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 We held a palaver with the Toyune, or head-man of the village, shortly after our arrival, and gave him a letter from the Ispravnik, desiring them to supply us with canoes and men, and to help us to the utmost of their power. He was probably unable to read it, as I afterwards discovered Jacof expounding it to him with great solemnity. I have no doubt, however, that the document lost none of its force in the rendering, for we were shortly afterwards supplied with some more cream in addition to that they had already sent us, and were informed that arrangements should be made for our start upon the morrow, as we desired. Much as we all wished to linger on our way, and to yield to the abundant temptations in the way of sport and natural history that the country offered us, we felt that we could not do so. We knew nothing of the length of the river journey that lay before us, and no one at Sherowmy was able to give us any information on the subject. The signs of approaching winter had already begun to make their appearance. The woods were aglow with autumn colouring; the new snow had already freshly powdered the lower slopes of the mountains, and the clear frosts to which we now woke every morning warned us that we had better not delay. On board the yacht, which was to meet us at the mouth of the river, there was, of course, no means of knowing the date of our arrival, and to keep the ship knocking about a dangerous coast, of which all we knew was that it was unsurveyed and exposed, would be in late September or October a decidedly risky proceeding. We accordingly gave up the plan we had formed of remaining for a short time in the neighbourhood of Sherowmy, and resolved to push on without delay.

CHAPTER VII.

000 **KAMSCHATKA** (*continued*).

We begin the river journey—Our rafts—Bad weather—Werchni Kamschatka—Melcova—A fish curral—Replenish our stores—Melcova church—*Kuklankas* and *parkas*—Extortionate demands of the natives—Curious marl cliffs—Mashura—Rows with the people—Leprosy—Piles of driftwood—Onset of the cold weather—Tschappina—We sight the great volcanoes—Our camp-life—Wild fruits—Renewed quarrels with the natives—An awkward dilemma—We win the game.

157 576 On the morning of September 1st our horse-boys departed on their return journey to Petropaulovsky. Whether it is owing to the depression peculiar to the country, so enlarged upon by Kittlitz, I cannot say, but there seems to be an utter lack of geniality among these people. They took their wages resignedly, and bade us an unceremonious adieu. Handshaking—the kindly custom in Scandinavia and other nothern countries on the termination of an engagement between master and man—appears to be unknown in Kamschatka. Perhaps after all it was better, for I do not suppose that any of us felt any great degree of affection for Vodki, and at a later period of our journey, fist-shakings would have better expressed our feelings towards the greater proportion of the people with whom we were brought in contact.

Having despatched a letter to the yacht with instructions as to the date of departure for the rendezvous at the mouth of the river, we went down to the stream to make the necessary preparations 322 for our voyage. The only species of boat used in the interior of 501 the country is the dug-out canoe,—a clumsily-shaped craft made

322 from the trunk of the *topoyina* or poplar-tree. They are generally
501 about twenty-five or thirty feet long, by two feet in beam and depth, and are made to a great extent by burning out the interior of the tree-trunk selected, the finishing only being done by means of axes. We were able to procure five of these boats, and by their aid constructed two rafts in the following manner. We lashed three together side by side, with an interval of about one foot between each, taking care to place the weakest in the middle, and on this foundation placed a platform of poles and axe-hewn planks amidships, for a length of twelve or fourteen feet. Over this platform we constructed a rough shelter-hut, with a birch-bark roof sloping away behind, and the back and sides composed of water-proof sheets which could easily be furled or removed when necessary. The other raft, which carried Louis, Cook, and our two hunters, was made in the same way, but without the hut; and owing to its having but two canoes as a foundation, was laden fully up to where its Plimsoll-mark should have been. Our natives sat at the head and stern of each canoe, wielding paddles with a spade-like handle. They were also provided with poles, the use of which, wherever the river was sufficiently shallow, they seemed greatly to prefer. Shortly before noon our preparations were completed, our men waved their adieux to the remaining three-fourths of the inhabitants of Sherowmy, and pushing out into mid-stream, we began our descent of the river.

PADDLE.

133 Immediately below the settlement the branches of the Kams-
136 chatka reunite to form a stream nearly as wide as the Thames at Hampton Court, but scarcely more than a foot or two in depth. The current is rather swift, but without rapids, and the only dangers to be apprehended are the snags beneath the surface of the water. In the upper part of the river there are not many, but, lower down, the tremendous freshets which occur on the

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133 melting of the snows carry down trees of large size, piling them
136 in enormous masses upon the banks, and depositing the water-logged trunks in the shallower parts of the river, a collision with which would probably result in the sinking of the canoe, from the liability of these craft to split. We progressed with tolerable rapidity, averaging about six versts an hour, rejoicing that stampedes were now things of the past, and that there was at least a possibility of some of our possessions reaching the journey's end unbroken. The river in its earlier course is very winding and Werchni Kamschatka, the next settlement we expected to reach, although only twelve versts from Sherowmy by land, is more than six times that distance by river. As far as our own feelings were concerned, however, we would willingly have prolonged it yet more, for weather and scenery were alike lovely. The river ran between pebbly banks lined with birches, whose white-barked stems contrasted with the brilliant gold of their foliage. Reach after reach of still water opened out to us its quiet beauty, and here and there a little gap revealed a Hobbema-like scene of sunny distance, whose clearness was unbroken by the waver of a single leaf. Far away in front rose a range of deep blue hills, jagged and peaky, patched only with snow, for their southern slopes had been thawed by the heat of the summer sun. The calm surface of the water was covered by little packs of duck, which rose in long lines as our rafts approached, and the smoke of our guns formed miniature clouds in our wake which hung motionless above the stream until the rounding of a corner hid them from our view. We paddled on silently, our natives talking but little. Now and again the warning *na pravo, na levo* (to the right, to the left) told of the neighbourhood of a snag, or a shallow bank necessitated the use of the poles; but for the most part our progress was one of uninterrupted quiet, and the laziest of Nature's lovers could have asked for nothing better than to sit and be paddled thus for the rest of his natural life.

We saw no four-footed game, with the exception of a couple of

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136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kamschatka River that is marked on the English chart of the country.
. 72 In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

22: Guillemard T-2 (1882) 1886 Kamchadal

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

563 The head-man of the village received us on landing—a person
622 of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167 Melcova owes its origin to an experiment. With the view of
563 encouraging the cultivation of the land and of making something
241 more of the country than a mere hunting district, where the in-
361 habitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian
R peasants were settled here in 1743, who were to devote themselves
177 entirely to agriculture. The result has been to a certain extent
. 24 successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

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563 glad to be able to get them. The so-called brick-tea is, of course, the only kind in use here, as in other parts of Siberia. It is made in cakes about ten inches by five, and three-quarters of an inch in thickness, squeezed flat by hydraulic pressure, and stamped with large Chinese characters; and were it only of better quality, it would be admirable for rough travel from its portability, and the impossibility of its becoming spoilt by wet. Brick-tea is to a Kamschatkan what coffee is to a Lapp. It is found in the very poorest and most miserable hut, and is regarded as just as much a necessary of life as tobacco. That sugar should also be highly esteemed by the natives is only what might be expected in these latitudes, but its price places it beyond the reach of most. We obtained some at the rate of eighteenpence a pound, but when Dobell visited Kamschatka in 1812 it was sold for as much as five roubles.

Melcova boasts of a resident pope and a church; the latter a log-built edifice, which was moved many years ago from Werchni Kamschatka. It is not ornamental, and is painted red on one side only. The pope received us at the porch, and showed us the interior with evident pleasure; while we, as in duty bound, did our best to assume the necessary air of charmed approval. It must be confessed that it was no easy matter, for the building was completely bare inside, and the walls were covered with English bedroom paper of the commonest kind, set off by an occasional breadth of another pattern, in which pink roses on a bright blue ground displayed themselves in the full atrocity of the early Victorian epoch. Over the altar were a few oil-paintings of saints, one or two of which were passably good.

In the same inclosure as the church, but apart from it, as is the usual custom, stands a little square belfry containing seven bells of peculiarly sweet tone. One is inscribed with the date 1761; the others are more recent. The church itself, we were told, was so old as to be beyond repair, and another one was in course of erection close by, the logs of which were of very large size. The

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563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.
132 The current of the river is rather swift here and at Werchni, and
133 we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281 While at Melcova we tried to get some of the reindeer-skin
291 dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

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281 exactly resembling those in use in Lapland,—made of soft leather
291 throughout, the sole included. The toe is slightly turned up, probably to keep the feet in place when in snow-shoes, and the

OUR COSTUME ON THE LOWER KAMSCHATKA.

boot is tightly stuffed with fine hay, which is intended to supply the place of stocking and sole combined. The *kuklanka* is merely a double *parka*, having the fur both outside and inside.

000 On the morning of the 4th September we left Melcova and

22: Guillemard T-2 (1882) 1886 Kamchadal

000 resumed our journey down the river. We had hitherto only been able to buy one canoe, and in consequence were in need of four others with which to make our rafts. These they refused to sell us, but offered to lend them, together with men to take us on to Mashura, the nearest settlement, for fifty roubles! The silver rouble being nearly three and sixpence, and the distance only sixty versts—rather less than forty miles—we at once refused, regarding the demand merely as one of the common incidents of bargaining, and expecting it very soon to be considerably reduced. We were rather astonished that there was no sign of anything of the kind, and after waiting some time we had ourselves to return to the charge. In vain we threw the Ispravnik at their heads: we had a discussion of an hour and a half's duration, which at last ended in our agreeing to pay forty roubles, but under protest. At the same time we informed them that we should lay the matter before the Ispravnik on our return to Petropaulovsky.

It was two or three hours after sunrise before we got fairly under way. The weather was gloomy and cold, but with the exception of one heavy shower, we escaped without much rain.
133 Shortly after leaving Melcova the character of the river scenery
137 changes. For the first time on our journey we noticed the pine and spruce, and welcomed them with pleasure, as a relief from the wearisome monotony of poplar, birch, and alder. Here and there curious mud cliffs bank in the stream; often eighty feet or more in height, and nearly perpendicular.[1] The men begged that we would not fire while passing under them, lest a landslip should occur; and apparently with reason, for the soil appears to be constantly crumbling away, and little cascades of dust poured unbrokenly from the face of the banks as we paddled beneath. In one place we noticed a chalybeate spring welling up close to the water's edge, while others of pure water seemed abundant at the base of these earthy cliffs.

[1] These banks of reddish marl, known by the name of *yar*, appear to be not uncommon in Siberia. The town of Krasnojarsk on the Yenisei is thus named from their existence in the vicinity.

22: Guillemard T-2 (1882) 1886 Kamchadal

133 Losing sight of the range near Melcova no more mountains are
361 seen, and Mashura, a village of fourteen houses and eighty-eight
484 inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some
000 moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

142 Mashura was, in bygone days, one of the largest Kamschatdale
144 settlements in the centre of the peninsula, but smallpox—the
164 disease so fatal on its first introduction among uncivilised nations—
177 broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the
361 natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

177 Most 1
of them were clothed in leather breeches and the boots I have
231 already described, with the ordinary loose blue shirt of the Russian
291 peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

164 If leprosy be in any way connected with a diet in which fish is
262 one of the chief constituents, as is by some supposed to be the case,
757 in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

133 We paddled merrily down stream in spite of the still unsettled
137 arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

[i.e., the inhabitants of Mashura--analyst]

Hitherto we had been able with the greatest ease to shoot as
136 many duck as were daily required for our party. At this part of the river, however, there were much fewer, but the birds of prey had considerably increased in numbers. The Ernes (*H. albicilla*) and Hobbies (*H. subbuteo*) were most common, and we procured a fine pair of the former. Neither of these species was shy, but it was only with considerable difficulty that we were able to get within shot of the Ospreys, which we found hawking the river in pairs, but less abundantly. We also shot a specimen of the Red-throated Diver, but our ornithological collection progressed but slowly, the number of species presenting themselves being extremely limited. In spite of the apparent absence of fish—for here but few lay dead upon the banks—the spoor of bear was as plentiful as ever, and an occasional one was more than once visible as we floated down. But unfortunately our journey had now resolved itself into a race against time, and delay was out of the question.

000 We broke camp long before dawn on the morning of the 6th September, and were afloat once more at 6.30 A.M. The morning was fine, but bitterly cold, and as the sun rose, the trees and long dank grass, glittering with the thick hoar frost, presented a rather more wintry scene than we desired. We were glad enough to seize the paddles and get what exercise was possible, and after two or three hours' sharp work we arrived at a bend in the river where a birch-bark hut and two or three canoes appeared to indicate the neighbourhood of a settlement. Not a soul was to be seen, but we learnt that Tschappina—a little hamlet of six houses—lay some five or six versts distant from the river, and at once despatched Afanasi to get what men he could. In three or four hours he returned, accompanied by four natives, but only two canoes were fit for use. The Mashura men, after some talking, offered one of theirs for the modest sum of forty roubles, and after half an hour's wrangling, we eventually became the purchasers for thirty. Its actual market value was less than ten, but we felt that if we could only get two more, we should be entirely independent of the natives, and considered it cheap. A further row then took place with

[i.e., below Mashura--analyst]

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000 regard to the price to be paid for the distance we had already gone, and when we eventually got off we discovered that we had lost five hours and a certain amount of temper to boot.

We floated silently down stream for a couple of hours or more, thinking over the discussions that, we knew only too well, would be renewed at the earliest opportunity, when, turning a sudden corner, we found ourselves face to face with a view that banished all thoughts of past and future annoyances in a moment. Before
133 us, eighty miles or more away, stood one of the grandest groups of volcanoes in the known world. Others there are, it is true, that are higher, although in most cases the elevation of the ground from which they take their rise detracts in no little degree from their apparent height. But here, from a base elevated scarce a hundred feet above the sea, a series of cones of the most exquisitely-symmetrical shape rose in heights varying from twelve to seventeen thousand feet. They were three in number. Nearest us was Tolbatchinska, dog-toothed in shape, with its apex on the western side, a long thin puff of white smoke drifting from its shoulder; and beyond, apparently in close proximity to one another, rose the twin peaks of Kojerevska and Kluchefskaya, perfect in their outline, —pyramids of the purest snow, before which one felt how poor was all language to express the sense of their perfect beauty. Snow mountains were no novelty to us. We had seen the Andes and the Alps, and had watched the sun rise on Cotopaxi, on Etna, on Fujiyama, and a dozen other mountains of equal note. But here all questions of comparison would have been a sacrilege, and floating noiseless over the unruffled surface of the river we sat
000 spellbound, drinking in the view. The sun sank slowly as we crept along, and slope and peak, at first a dazzling white, turned slowly to a glowing gold. On either hand the fast-approaching night had changed the glories of the autumn tints to a sombre shade of violet, and behind us the river was a mere streak of light. The bright glow of the fire upon the other raft lit up the bearded faces of our Russian guides around it, and when the daylight had

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000 fairly waned, the head of Klnchefskaya stood out a pale greenish white,—a spectral mountain against the fast darkening sky. Come what might, even if we were never again to get a glimpse of them, we had seen the great volcanoes, and we felt that the sight was one that we should not easily forget for many years to come.

Constant practice, together with the "division of labour," had by this time rendered the pitching of our camp an affair of a few minutes only. Pressed as we were for time, we had to continue paddling until it became too dark to see the snags or sunken rocks ahead. The rafts were then run ashore at the nearest beach and the site for the tents selected. In this we had the choice of two evils—the rough ground and rank vegetation of the forest above, and the stony or sandy beach by the water's edge. We always chose the latter, owing to the difficulty of clearing the forest, but it must be confessed that the greater cold and damp of the river-banks almost outweighed their advantages. The cooking of the dinner, which the indefatigable Spiridione had nearly completed on the raft, received its finishing touches at the new fire, and almost before the tents were pitched the usual menu awaited our approval. It was not a varied one certainly, but it was the most luxurious I have ever experienced in camp-life. Soup *à la chasseur*, boiled salmon, stewed capercailzie or grouse, teal *à la* Kamschatdale, bilberry jam, and tea or coffee form a very respectable meal for a traveller whose appetite has been sharpened by the keen air of a northern autumn; and it was but seldom that we failed to do justice to it. And when the journals had been written up and the birds skinned, and we smoked our last pipe at the enormous fire before turning in, we felt that, but for the natives, Kamschatka was as pleasant a country for camping as we had ever experienced.

We were usually afloat again before six o'clock, but our departure was somewhat delayed on the following morning by the unintentional cold bath of one of the members of our party. It is doubtless something of a surprise to the system to find oneself at

000 early dawn, with the thermometer below freezing, struggling in
an icy river with all one's furs on, but the unlucky bather was
soon ashore, and a sharp rub-down at the camp-fire soon restored
both his circulation and his equanimity. The day was once more
bright and clear, and the distant peaks looked magnificent in the
133 morning sun. As we drew nearer, the mountains opened out, and
the western slopes of Tolbatchinska no longer hiding Kojerevska,
the latter volcano appeared, from this point of view at least, as a
perfect cone of regular shape, which half concealed the equally
regular and still higher peak of Kluchefskaya, the king of the
volcanoes of Kamschatka. Other mountains too had come in view.
To the north and west of Kluchi,[1] but in close proximity to it, the
smoothly-rounded summit of Uskovska rose above the dark line of
forest, and far away to the eastward two isolated and nameless
cones of graceful shape appeared on the horizon, which, in spite of
their eight or nine thousand feet, are recorded in no map.[2]

133 At this part of the river the conspicuous marl cliffs disappear,
137 and the pines are replaced by aspens, a tree of which we had
361 hitherto seen but little. Landing in the afternoon to take photo-
graphs and observations, we came upon quantities of the *cherunka*
or wild cherry. The fruit is black, and of the size of a large
black currant; very sweet, but with a peculiar sloe-like astringent
after-taste. The delicious Scandinavian *moltebæer* we did not
meet with, but our common raspberry and red currant are in some
places plentiful. The latter fruit is, in our English gardens,
scarcely worth eating, but in the wild state it is very sweet and
palatable.

Eleven hours' steady paddling brought us, at 6 P.M., to three
deserted balagans, without fish, and with nothing to indicate the
presence of a human being save four canoes hauled high and dry
upon the bank. We learnt that Tolbatchik, a village that we

[1] To the natives, with their love of contractions, the great mountain is thus invariably known.

[2] These we have since named Mount Gordon and Mount Herbert Stewart.

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133 expected to find here, is not situated on the Kamschatka, but upon
361 a tributary stream which joins the main river some forty versts lower down. There is a short cut overland, however, and we settled to camp and despatch Jacof Ivanovitch to the village at daybreak on the following morning for a fresh relay of men.
000 Close to the camp we shot a large blue hare, the pats of which were very much developed, and clothed with the thickest fur. This, curiously enough, was the only one we met with during the whole journey. The sunset was strikingly beautiful. The eastern sky was a deep purple, and the snowy peaks so bright a rose-colour, that no painter would have dared to transfer them to canvas. But the appearance of the weather was unmistakeable, and we set to work at once to dig deep trenches round the tents in anticipation of the coming rain.

The morning broke as we had foreseen. The wind had shifted to the south, and the rain descended with a steadiness that boded a long continuance. The dull leaden sky reminded us of our native land, and the heavy mist seemed to render even the inside of the tents almost as wet and chilly as the sopping grass without. The natives had retired to their tent, and Verglaski alone, slow and imperturbable as ever, seemed unaffected by the weather. Jacof had started early for Tolbatchik, and there was nothing to be done until his return. We went in search of birds, either for preservation or the pot, but hardly a living creature was to be seen, and a hobby, an owl (*Surnia ulula*), and a small thrush (*T. fuscatus*, Gm.) were the only specimens we obtained. The afternoon, however, was relieved from dulness by our natives, though in a manner that was anything but agreeable, for we found ourselves involved in a renewal of the endless wranglings and discussions of which we had already had more than enough. The Mashura men applied for their money, stating that they wanted to return. Four of them had gone back at Tschappina, but the other four had come on with us, and to these we tendered a sum exactly proportionate to that they had already received for the first part of their journey. This,

000 rounded a corner, and the scene of our late squabbles was lost to sight. In justice to ourselves I should add that we deposited the money actually due to these men with the Ispravnik on our return to Petropaulovsky, but I believe that we should all have been glad to think that they never got it.

We had patched up our canoes as well as we were able before starting, and were glad to find that they made but little water, although the large, and as we had supposed, sound one, proved after all to be quite as leaky as the others. The weather, which had been gloomy and threatening, now showed some signs of improvement, and our spirits rose with the more promising condition of our surroundings. The size of our raft was against fast travelling, but we paddled steadily on, and had made forty versts before
133 camping for the night. At 6 P.M. we passed the mouth of the Tolbatchik River, coming in on the right bank; a tolerably deep stream with a breadth of about thirty yards at its junction with the Kamschatka. We held a consultation as to the possibility of going on all night, but the cold was so great and the passage down the river so risky from the snags, that we eventually decided against it. An accident to our raft in its present state would have been something more than a misfortune; it would have meant little less than absolute disaster.

000 during our river journey nearly spoilt what was otherwise a very pleasant expedition.

We landed for a meridian altitude, and improvised an artificial horizon by means of a bucket of water. The banks were low and flat, and frequently intersected by muddy creeks, while the birches and firs had almost disappeared, giving place to the willow and
136 wild cherry. I have rarely seen more impassable ground than that
137 close to the river.[1] The coarse grass rose high around us, preventing the possibility of seeing anything—a condition which obtains in almost every part of the country; but an additional and far more effectual barrier to our progress existed in the shape of a thick tough brushwood which clothed the irregular ground with a network of small boughs, catching our feet firmly at every step. Later, at Cape Shipunsky on the south-east coast, we found the country even more impracticable. The bears, however, manage by their great weight to force themselves through this thick cover with little apparent difficulty. Just inside the forest, at a distance of six or eight feet from the river-bank, is a firmly-trodden path some two feet in width, made entirely by these animals; and as these paths are to be found without a break on either side of the river in its whole course through the forest country—a distance of about 500 miles—it will be understood why bears' skins do not command any very high price in the peninsula.

The procuring of a sufficient quantity of duck for our daily needs became at this period a rather difficult matter, the main river being deserted by them for smaller streams and marshy pools in its vicinity. Sea-birds became more numerous; a tern (*Sterna longipennis*), two or three phaleropes, or the Red-throated and Black-throated Divers (*C. septentrionalis* and *C. arcticus*), were to be met with from time to time. We also shot a *Podiceps*, which seemed to be identical with our own Red-necked Grebe.[1] On the banks an

[1] According to Mr. Seebohm, the eastern form of *P. rubricollis* is conspicuous for its larger size, and especially for the greater length and stoutness of the bill; and the measurements of the above-mentioned specimens certainly bore this out.

[the Kamchatka River above Kojerevsky--Analyst]

136 eastern form of the Pied Wagtail (Kittlitz's *Motacilla lugens*) was extremely numerous; the Yellow Wagtail much less so. But of all the land birds the Kamschatkan Marsh Tit (*P. kamschatkensis*) was at this part of the river by far the most abundant. For two or three days we saw them in flocks of from fifty to a couple of hundred individuals, streaming northward along the bank from tree to tree.

133 Shortly after mid-day we passed the mouth of a river joining the Kamschatka on the right bank. The natives knew it as the Kojerevska. It is a stream of some size, being apparently of considerable depth, and having a breadth of forty yards at its junction with the main stream. As far as we could gather, it drains the opposing slopes of the Tolbatchinska and Kojerevska volcanoes.

We reached the little hamlet of Kojerevsky at nightfall. The distance from Tolbatchik, the scene of the last rows we had had with the natives, is only ninety-one versts instead of two hundred, and we might with perfect justice have reduced our payment to half of the sum we had promised. But, to tell the truth, we had become so wearied of the endless wranglings in which we had been involved in all our dealings with these wretched people that we paid them without a word. It was better to let them think that they had deceived us than for them to imagine that we had weakly yielded to what we knew to be an imposition. We were 262 pleased to find that the Kojerevskans exhibited strong evidences of 144 their Kamschatdale descent. We were received by the head-man, a little brown fellow with bright eyes; and under his direction the people did everything in their power to help us, carrying up our baggage, bringing us wood, and altogether showing us an amount of civility that was as new to us as it was agreeable. They provided us with wild cherries, cranberries, potatoes, turnips, milk, cream, and butter, and last, but by no means least, with a loaf of coarse rye bread, which, we heard, had been specially prepared for the Kluchi pope, who had been expected to pay the settlement a visit.

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823 We felt that we had got among friends once more, and managed by
133 the aid of all these luxuries to pass a very pleasant evening, in spite of the cold. At night the beacon flame of Kluchi, now brilliantly illuminating the clouds of smoke that hung around the crater, now sinking almost to extinction, shone out far above our heads. There was an angry look about the volcano, and we were told that its activity had of late been somewhat increased. The explanation was simple. The Kanuli, or Spirits of the Mountains, whose home is in the bowels of the volcanoes, had merely been more fortunate than usual. It is hardly necessary, in these days of omniscience, to explain that it is to these beings that all volcanic disturbances are due. They go to the sea at night to catch whales, which are their favourite food, and the roasting of several of these animals within the crater is, as may be imagined, an operation which requires the consumption of no inconsiderable amount of fuel.

000 The weather had become steadily colder from day to day, and as we turned out on the morning of the 11th September we regretted that the Spirits of the Mountains had not seen fit to do their cooking in closer proximity to our camp. Our moustaches were frozen to the blankets, and the water in the bucket inside our tent was a sheet of ice. Morning observations and photography are always interesting, but they are certainly best appreciated when the thermometer is well above freezing. The view from our camp was glorious, and the mountains, cloudless from base to summit, towered above us with the startling clearness of outline so charac-
361 teristic of northern regions. Kojerevsky—a village of ten huts and
133 sixty-three inhabitants—lies at the foot of Uskovska, a mountain of nearly 13,000 feet, whose summit from this aspect presents the appearance of a uniformly rounded dome of snow. It is in reality twenty-three miles off as the crow flies, but the giant scale on which Nature works in these regions belittles space to an extent that is inconceivable, until the hard facts of actual measurement are before one. A little farther to the south and east is Kluchi, whose sharp peak rises to a vertical height of 3¼ miles above the

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133 river, guarded on the right by Kojerevska, which is inferior to it in
361 altitude by fifteen hundred feet. To the extreme right lies Tolbatchinska, and above the intervening stretch of flat forest land the solitary peaks of the two isolated volcanoes I have before mentioned are visible some fifty miles away.

We had but little difficulty in getting the canoes requisite for

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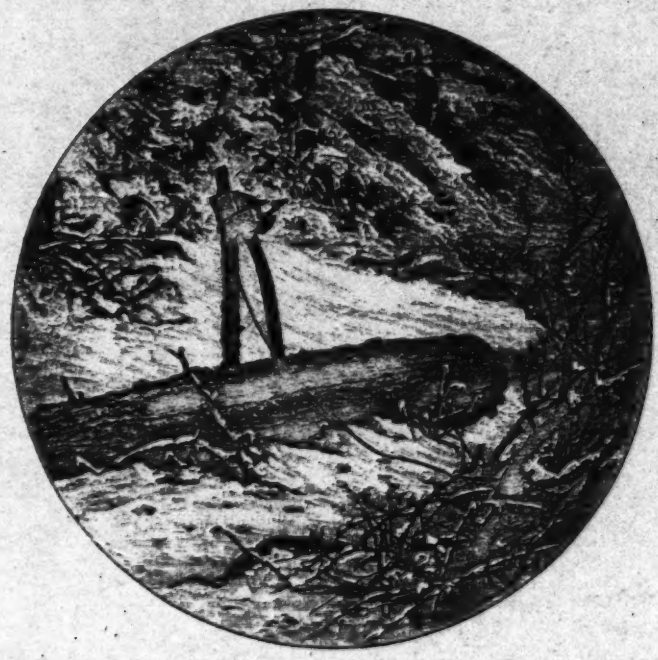

FOX TRAP.

constructing our raft upon somewhat less risky principles than the one that had, thanks to our good fortune, borne us the last seventy miles of our journey in safety. We reverted once more to our old plan of dividing forces, and late in the morning recommenced our voyage amid the firing of many salutes from the guns of the Kojerevskans, to whom we were really sorry to have to
000 bid adieu. At 4 P.M. we reached Uskovska, a hamlet containing

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224 At 4 P.M. we reached Uskovska, a hamlet containing
361 thirty souls only. Landing to rest, we noticed here, for the first time, a fox trap of simple construction, which is said nevertheless to be very effective. A broad mortice is cut in an ordinary rough log, and in the longitudinal hole thus produced a spring is placed, composed of two pieces of raw hide twisted together, which impels a barbed prong. This is discharged by means of a trigger, to which a string is attached leading across the animal's usual track. Although Kamschatka is a country which would appear to be peculiarly adapted for trapping, it seemed to us that it was not undertaken to anything like the extent that might be expected.

000 We camped eighteen versts below Uskovska, in good spirits at the improved condition of our affairs and our rate of progress down the river. We had need of them, for after dinner, on inspecting our last case of photographic plates, which had been packed with all possible care in blankets, we found that the greater number of them had been broken to atoms. Such are the results of pack-horse travelling! Of the whole lot but two remained, and these, with one or two we had left over from another case, were all we had to last us for the rest of our journey! It was a cruel disappointment. We were in the midst of scenery which for magnificence was almost without parallel, and which we could never have a hope of seeing again. For some days the volcanoes, which at this season of the year are often invisible, had shown themselves without a cloud. And now, just as we were approaching them, and arriving at the very part of our journey of which we most desired to have a record, we were doomed to failure—a failure the harder to be borne from the fact that our limited time precluded any possibility of sketching.

It was blowing hard from the W.S.W. as we embarked at daylight on the following morning, and before long the wind had freshened considerably. The thermometer was not lower than usual, but the keen wind penetrated our garments and froze us to the bone. It was in our favour, and hoisting a portion of one of the tents as a sail, we sped along merrily. Soon, however, it became evident

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000 that we could no longer continue our journey. Everything is comparative; and to our craft, with its low free-board and heavy load, the three-inch waves became more formidable than the heavy seas in a gale in "the Bay" appear to an ocean steamer. It would have been too absurd to founder in such a tea-cup storm, so we made for the shore, and set to work to cut down trees till we had to some extent restored the circulation in our limbs. An hour or two later the wind dropped, and we were able to proceed. We noticed the signs of some old forest fires near this spot, but they seem, happily, to be very rare. In Scandinavia, in a journey of the length that ours had been, we should have seen fifty or more. Here the great precautions that are taken against their occurrence are no doubt the chief reasons for their infrequency. Our hunters told us that the sables do not return to these spots for many years after, even if the forest has been but slightly injured by the fire.

361 Late in the afternoon we passed the hamlet of Kristovsky, or
133 Kristi as it was called by our men, and a few versts farther came
484 upon some people encamped upon the banks. It is curious how little the rivers are used as highways either during the winter or summer. The natives can hardly be said to travel at all, excepting in their winter excursions after sable. This was only the second party we had seen away from the settlements, and we were told that no one had passed down the river from Melcova that year. We shouted greeting as we passed, but there was no time to stop, as we wished to reach Kluchi that night. Our Kojerevsky men worked their paddles with a will, and before long we reached the mouth of the Yelofka River, a large stream, eighty yards or more in width, which joins the Kamschatka on its left bank. It flows due south, draining the western slopes of the great Sevelitch volcano, and is used as a road to Tigil, a settlement on the river of that name in the north-west part of the peninsula, which is, or used to be, a trading station of some importance to which the Koriaks
133 and Tchukchis bring in their furs for sale. The river is ascended by canoes for fifty or sixty miles, the watershed is then crossed by

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133 a march of two or three days' duration, and the traveller, striking the upper waters of the Tigil, reaches his destination by canoe.

At or about Kristovsky the Kamschatka, whose direction, roughly speaking, has been due north, bends suddenly to the east, and circles round the base of the stupendous volcanoes that guard its mouth. The aspect of the peaks alters considerably. Were not such a thing almost impossible, one would say that the scenery had increased in its sublime magnificence. Uskovska, Kojerevska, and Kluchi alone are visible, and of the two latter it is hard to say which is the finer. Kluchi is, and had been from every point from which we had hitherto beheld it, a cone of absolutely perfect shape, and Kojerevska is but little less regular in its outline. Now, as we advanced, the base of the latter was hidden in dense cloud, but its summit—a peak of extreme sharpness—stood out bare against the sky, the northern face a vertical wall of black rock on which no snow could rest. The river here is much increased in size, and is from three to four hundred yards broad. The depth is very uncertain, varying from a mere shallow intersected with deeper channels to twenty feet or more.

000 A few versts above the village of Kluchi four canoes pushed out from the banks and joined our party. Fully one-half of their occupants were women, who seemed to use the paddle with as great dexterity as the men. The boats were laden almost to the gunwale with the Kisuchi salmon, almost all of which were in good condition, though some had the peculiar rounded snout developed to a most extraordinary extent. One of the women—a most repulsive-looking creature—was dressed in man's clothes, but another had distinct pretensions to good looks, and ranging her canoe alongside, was soon deep in a flirtation with Afanasi, of whose reputation as a lady-killer we had all heard. The sun was setting as we rounded a corner, and came in sight of the village, its smoke hanging as a blue haze in the still evening air. To our left the Harchinska Mountains, furrowed with deep gorges, looked almost black against the amber sky. The huge cone of Kluchi caught the

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000 last rays of the sun and flushed a pale pink, while at the lip of the crater a fleecy puff of smoke hovered for an instant as if in doubt, and then floated out a long thin streamer to the east. Around his shoulders hung a thick belt of cloud, gathering rapidly with the fast-approaching night, and beneath, slope after slope rose steadily up to meet the pyramid above. Kojerevska showed here and there a patch of glistening snow through rifts in the dense veil that hid him from our sight, and on the lake-like surface of the river below our little fleet of boats paddled merrily homewards to the rough and mournful cadences of a Kamschatkan love-song. Suddenly the flame of the first salute shot out from the other raft, the signal for a general fusillade. It was answered by a flash and a report from the village; and a little later we stepped ashore at Kluchi, and were welcomed heartily by the head-man and a little crowd of the inhabitants.

133 The morning of September 13th broke with hardly a cloud;
137 and the view of the mountains, which now lay nearly due south
361 of us, was so magnificent that I did not hesitate to devote one of my last plates to it. We crossed the river in a dug-out, and landed on a sand-bank near the opposite side. The stream is here six hundred yards in breadth, and forms a fitting foreground to the picture. Behind the village, whose weather-worn huts line the banks for nearly a quarter of a mile,—for Kluchi may be regarded almost as a city in this part of the world,—the even slopes of ruddy vegetation rise smoothly upwards, till, at the height of two
133 or three thousand feet, the snow is reached. The outline of the mighty volcano was as perfect here as before, and its exquisitely graceful slope as unbroken. Near the summit, on the side immediately facing us, a deep furrow, as yet untouched by the rays of the morning sun, showed the remains of some past eruption—a huge scar which the snows of many winters had done their best to obliterate. From the crater light puffs of smoke drifted slowly away to the east, far whiter than the snow which lay below, for on all sides, and especially near the summit, a sprinkling of ashes had

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133 dulled its purity almost to a grey. The rounded half-dome of Uskovska to the west showed a vast field of unbroken snow, and on the side towards Kluchefskaya appeared to have been completely blown away by some great eruption in past years, leaving a huge open crater, the western walls of which alone were standing. The upper part of these, which was all that we were able to see, seemed to be almost vertical upon the inner face. Between the two mountains was a lesser cone, which, like Uskovska, appeared extinct. To us it was known as Little Kluchi, though whether we obtained this name from the natives or not I do not now remember.

The opportunity was an excellent one for taking further observations on the heights, the river forming a good base. We accordingly took advantage of it; and from the results of this and other work the following may be given as fairly accurate altitudes for the four chief volcanoes lying to the south of the lower part of the Kamschatka River:—

Kluchefskaya	16,988 feet.
Uskovska	12,508 „
Kojerevska	15,400 „
Tolbatchinska	11,700 „

Mount Gordon and Mount Herbert Stewart—the two volcanic cones lying to the south-east, to which I have alluded on a previous page—are probably both about 8000 feet in height.

It was late when we returned to breakfast, and found a visitor awaiting us. He was a poor old fellow nearly seventy years of age, who had spent three-and-thirty years of his life in this one spot, acting as a sort of doctor. What diplomas, if any, he possessed I do not know, but he seemed to have had sufficient ability at some remote epoch of his existence to have forgotten something. Half in dog-Latin, with a word or two of English, and half through Jacof and Afanasi, he gave us some few scraps of information. It seemed that three years previously—in 1879—

133 an eruption of Kluchi had occurred. There had been no previous warnings, although the mountain is always more or less in a state of activity, but on the morning of August 14th, dense clouds of smoke appeared above the crater, and at mid-day the sky was as dark as night. Before long ashes began falling, and in a few hours the ground was covered with them to the depth of three inches. There was no earthquake, but, on the following morning, a small stream of lava poured from the lip of the crater on the north side. It descended but a short distance, however, and, shortly after, the mountain returned to its usual state of threatening quiescence. With this exception there have been no eruptions within the memory of man, or at least none of any magnitude. A few ashes often fall, and had done so not long before our visit, but the recent falls of snow had done much to hide them.

Kluchi appears to have been still more active in the middle of the last century. Krasheninikov, in the work I have mentioned, says that "it throws out ashes twice or thrice yearly, and sometimes in such quantities, that for 300 versts around the earth is covered with them to the depth of a vershoke (nearly two inches). From the year 1727 to 1731 the inhabitants observed that it burnt almost without interruption, but they were not under such apprehensions as in the last conflagration in the year 1737. This terrible conflagration began the 25th of September, and lasted one week with such violence, that to the people who were fishing at sea near the mountain it appeared one red-hot rock, and the flames which burst through several openings sometimes showed like rivers of fire with a shocking noise." On the 6th of October there was an earthquake of tremendous violence in the Avatcha district and the southern point of Kamschatka; regions which, it should be observed, lie in a direct line between Kluchi and the volcanic chain of the Kuril Islands. An enormous tidal wave occurred, "overflowing the shore 200 feet high," and killing many of the inhabitants; but the country in the immediate neighbourhood of the volcano did not appear to suffer much, although a violent

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133 earthquake was experienced at Nischni Kamschatka on the 23d of the same month.

In 1762 and 1767 outbursts again occurred, though of very much less severity, but subsequent to that time no accounts of other eruptions have, as far as I am aware, been published, with the exception of that of Professor Adolph Erman, who, in 1829, found the peak "in picturesque and sublime activity, and approached the burning lava, which poured forth a continuous stream," till he reached the height of 8000 feet above the sea.[1]

Upon the northern side of the Kamschatka River, 59 miles N.E. by N. of Kluchefskaya, rises the irregular mass of Sevelitch, of which we had hitherto seen but little. Its height is probably between ten and eleven thousand feet, but we were not able to take any measurements to correct this estimate. It is highest and most conical at its eastern side, and at the time of our visit was sending forth considerable volumes of smoke, which appeared to come from a crater low down on the south-west aspect, but owing to the extreme irregularity of the mountain, it was difficult to ascertain its exact position. Nothing indeed can be more striking than the difference between this volcano and Kluchi. The latter, with its wonderful steepness of slope and its unbrokenly conical shape, is probably one of the best instances that could be given of a mountain that owes its entire height and form to the slow piling up of the ashes and lava ejected from its crater. But in Sevelitch it is evident that the method of formation has been very dissimilar, and not of gradual occurrence, excepting as regards the secondary craters that have formed on the original mass. Hr. Erman, who passed several days on the mountain and the plains below, regarded it as having been forced from beneath the surface at a single eruption, since its bulk was composed of crystalline rock "resembling lava as little as the granitic rocks of the Alps." It would seem as if some giant power had upheaved the thin crust of the

[1] "Journal Roy. Geogr. Soc.," vol. ix. p. 509. In the map accompanying this letter, Uskovska is placed some miles to the south of its real position.

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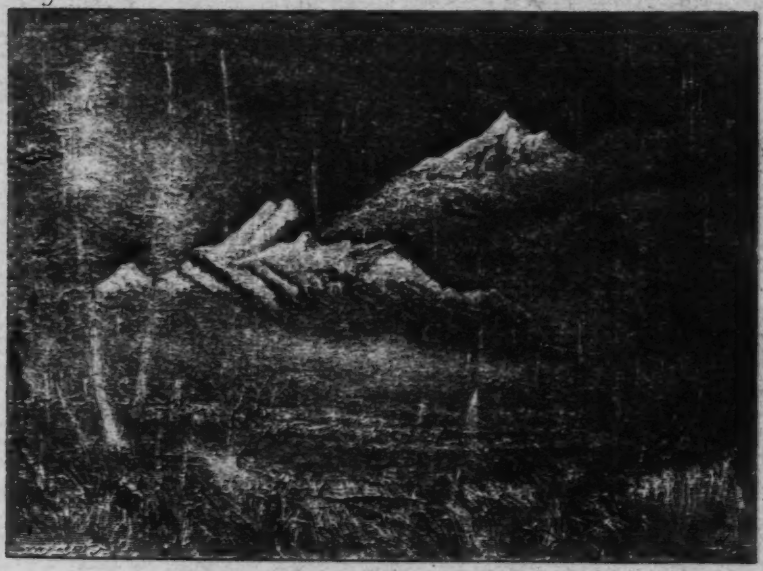
133 earth's surface, and that through the openings thus formed the liquid rock had poured, retaining the uptilted fragments in their new position.



SEVELITCH VOLCANO, FROM THE SOUTH.

About nine months after our departure from Kamschatka a series of eruptions appear to have taken place, which in grandeur must have rivalled those described by Krasheninikov in 1737. Of these no particulars seem ever to have been published, for two years later the very fact of their occurrence was unknown both to the Royal and Royal Geographical Societies. But, from the fact of their having been synchronous with the terrible catastrophe at Krakatau, they present features of such interest that I here quote the cutting of the "Japan Gazette," to which I am indebted for the only information I can obtain upon the subject:—

"THE JAVA ERUPTIONS.—We are indebted to Mr. T. R. Green, who has just returned from a prolonged journey in Northern Asia, for some highly

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133 interesting information respecting volcanic disturbances in that region. The particulars given, taken in connection with the recent volcanic eruptions in Java, seem to indicate that the active agency extended over an immense area. The disturbance of Mount Krakatau began early in August last, culminating on the 26th. At the beginning of July a cone, from 8000 to 10,000 feet high by estimation, not marked on the chart, but situate near the Kamschatka River, supposed to be inactive if not entirely extinct, suddenly split in two, emitting immense quantities of lava, which poured down its slopes. This phenomenon was not, however, accompanied by any very great local disturbance. Mount Siveluch (of Keith Johnston's map), the highest peak of the Kamschatkan range, 17,000 feet high, was in active eruption throughout the whole month of July, the pillar of flame in calm weather being distinctly visible at distances of from 200 to 250 miles; giving, after allowance for refraction, an altitude above the summit of the cone of 8000 to 10,000 feet. When the air was still, smoke, steam, etc., rose vertically to an elevation of 15,000 feet, where, meeting with a northerly air current, it abruptly took, at right angles, a southerly direction in a thin direct line. Captain Hubbard, of the M.R.S.S. *Toyoshimamaru*, recently described an eruption which took place at Shibotaru, one of the Kuriles, in the early part of June last. A copy of his letter addressed to Professor John Milne was, by the kindness of the latter, published in the 'Japan Gazette' of 30th June. Mr. Green further states that in April last the ice in the neighbourhood of the Kuriles was discoloured with volcanic ashes for miles in every direction, indicative of eruptions of unusual violence, probably in the north, but of which we have no note. Mr. Green was enabled to make some very interesting observations on cloud formations in the vicinity of the Kronotsky Peak. He describes this as, perhaps, the most perfect cone in the world, because it tapers to a fine point, and is of greater elevation than Fujiyama. At 2 A.M. to sunrise it would show perfectly clear and distinct from the sea like an unplumed cocked-hat. As the sun rose the snow would soften, evaporation no doubt begin, and mists would slowly gather around the summit, giving the mountain the appearance of a gigantic plumed field-marshal's cocked-hat. At daylight on the next morning there was not a vestige of the plume, but the process of its formation proceeded with unvarying regularity. This information will probably attract the attention of the Seismological Society. There certainly now seems an opportunity rarely offering for collecting and digesting the data respecting recent volcanic disturbances which should be availed of."[1]

[1] The above paragraph needs explanation. What the "cone not marked on the charts, but situated near the Kamschatka River" may be it is impossible to say, but

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000 Kluchefskaya and his fellows have led me into a longer digression than I had anticipated, and I must return to the poor old doctor who, had we been better acquainted with his language, would doubtless have proved an interesting companion. He told us that we were the first travellers he had ever known to come down the Kamschatka River. We appeared to be a source of almost childish delight to him, and his pleasure was still further increased by discovering a professional brother. He was becoming blind he thought, and asked me to look at his eyes, which showed signs of advancing cataract. Operation would have been inadvisable at the stage they were in, and I told him that I feared I could do nothing for him. He kissed my hand and raised it to his forehead, saying that it was of no consequence, and that he loved all doctors, no matter of what nationality. There is a law against selling liquor in the interior of the country, and his eye glistened half with sorrow, half at the aspect of a bottle of Hennessey that stood at hand. We offered him a glass, and it disappeared as if by magic, and as he made his bow and *do swidania*, he absently helped himself to another bumper. He had asked me to go with him to his house, as he had a present for me. On arriving we found his granddaughter, a pretty little child of five or six, playing with a young blue hare which lolloped up in a most confiding way to have its ears scratched. This was the present, but it was evidently such a pet of the little girl that it would have been a crime to have taken it. The old gentleman, however, apparently wished to make some return for a lancet I had given him, and was rather disappointed at my refusal until he suddenly bethought himself of a skull of a Kamschatdale, which he had found laid bare by a

by "Mount Siveluch" there is, I think, but little doubt that Kluchefskaya and not Sevelitch is meant. It is evident that Mr. Green did not himself visit the neighbourhood of the great volcanoes, or he would not have described the Kronotsky Peak as the most perfect cone in the world. The height of this mountain, which lies immediately to the east of the lake of the same name, is given by Findlay as 10,610 feet, while that of Fujiyama has been variously estimated at from 12,234 to 12,365 feet.

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000 flood at one of their ancient burial-places,—a treasure that I joyfully accepted.[1]

We had taken up our quarters at the house of the head-man, and on my return thither I found that the pope had arrived to pay us a visit. His appearance was not prepossessing, and unkempt hair, a very fully-developed squint, and a total absence of conversation rendered him decidedly uninteresting as a companion. But he brought us two remarkably fine cabbages as a present, for 563 which unaccustomed luxury we felt very grateful. We learnt 793 that there were only nine priests or popes in the whole of R Kamschatka. Like the doctors, they are paid by the Government, 177 but they also receive tithes in kind from the people. They come .79 for the most part from Siberia, and socially rank little, if at all, above the peasantry. This gentleman, for example, had married the sister of one of the horse-boys we had brought with us from Petropaulovsky to Sherowmy, who had been sable-hunting with Jacof Ivanovitch at the Kronotsky Lake during the preceding 000 winter. We called on her to thank her for the present, and found her a homely litttle woman with a much larger fund of conversation than her husband. On leaving the house a grey-bearded old man rushed out upon me, seized and kissed my hand, embraced me, patted me on the back, and poured out a torrent of unintelligibility which led me to the extremely English conclusion that he was drunk. I had wronged him. Afanasi was at hand, and gave me a *précis* rendering of his speech. He was merely expressing his delight at meeting with a European traveller!

The doctor had arrived to pay us another farewell visit when I again reached our house. We had many attractions for him; some of them in bottle. Poor old fellow; his sorrow at parting with us was too much for him, and when we turned round and discovered the Hennessey at the lowest ebb, it gave us almost pain to have to sign to Louis to remove it.

[1] *Vide* "Journal Anthrop. Inst.," Vol. xvi., No. 1, p. 21.

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563 Our original intention had been to leave Kluchi in the forenoon, but many things conspired to prevent it. We had bought some of the little birch-bark barrels that they make so cleverly throughout the country, and there was a great discussion as to whether we had paid for them or not,—easy to be explained by the fact that the inhabitants of the village are the descendants of Siberian Russians brought from the River Lena, and settled here about the year 1735. Wearied with the constant recurrence of these impositions, I wandered out at the back of the village to inspect the fields, which are of larger extent here than in any other place we had yet visited. Rye is cultivated, though apparently not to any very great extent, although the valley of the Kamschatka is said to be the only place where there is any chance of its ripening. It is sown in the middle of May, and the harvest, when there is one, is at the middle or end of August. Potatoes and turnips were grown in some abundance, but there was little else in the way of cultivation except a few poor attempts at garden produce. The catholic tastes of the sledge-dogs prevent the inhabitants from keeping the smaller domestic animals, but cows are numerous, and almost every house had poles placed around the front to keep off these animals, which are permitted to wander about at will.

000 The discussion on the birch-bark barrels had subsided on my return to the house, but we found that our landlord had inserted the pope's cabbages in the bill—or what would have been the bill did such things exist in the country—and more difficulties arose before we finally got afloat. At the last moment the doctor again appeared, with two boxes and a loose razor which he begged us to take to his son in Petropaulovsky. In his hand he bore the Kamschatdale skull, reverently tied up in an old handkerchief. We paid our landlord, and included the pope's cabbages; we paid twice for our birch-bark barrels; we slung up the skull at the back of our hut; and bidding *do swidania* to the united population of Kluchi, who were drawn up on the bank to watch our departure,

000 we paddled out into the current, and in another ten minutes the village was lost to view.

114 In Findlay's "North Pacific Directory" it is stated, though upon
135 what authority is not clear, that the Kamschatka River "is said to
136 be capable of admitting vessels of 100 tons about one hundred and fifty miles up the stream." This, however, is not correct, or at any rate is very misleading, for the river is beset throughout with sand-banks which in many places apparently lie completely across the stream. Thus, opposite Kluchi village there was only an average of seven feet of water, while both above and below we got depths of twenty or thirty feet and more. The sand-banks also are very unexpectedly placed, and the navigation of the stream by a large vessel, even if possible, could only be accomplished by the aid of an elaborate system of buoys, which, I need hardly say, is not likely to be instituted for many a year to come. From some versts above Kluchi to the mouth of the river, except at the Tchoaki or narrows, to which I shall have occasion to refer presently, many islands are formed by the bifurcation of the stream, some of them of large size, and the river increases considerably in breadth. Opposite the village it is said never to freeze entirely over, a fact the people attribute to the existence of hot springs in the river bed. They also told us that salmon remain here throughout the winter, though not in any great numbers.

Among these islands there appeared to be more duck than we had been lately accustomed to see in the lower part of the river, and we here obtained the Shoveller (*S. clypeata*) for the first time. Landing to replenish the larder at some small lakes towards the hour of sunset, we remarked both snipe and wild geese, neither of which we had previously met with, but it was too dark to dis-
000 tinguish the species. Verglaski followed us on occasions such as these with the stolid expression and steady gait he always affected. Nothing short of a bear, I believe, ever roused him to any less dignified pace than a walk, and as he slowly followed us, I had a lurking suspicion that he regarded our occupation as a rather

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000 childish one. I had too much belief in his moral character to attempt to account for his peculiarities by any such physical reasons as "the rheumatics"—a cause that one of us profanely suggested. As a retriever he was inimitable. We had shot a duck that fell far out into the shallow lake, and while looking at it, and calculating the possibilities of its drifting ashore, Verglaski came up and realised the situation. He glanced at us in a way that said plainly, "This is not my business, but if you will wait here, I will see if I can get it out for you," and proceeded to do so with a three-yards-a-minute pace, and a concentration of purpose that was irresistibly ridiculous. Poor old dog; it was the last service he ever rendered us.

We had contemplated sleeping on the rafts, and continuing our journey through the night, as the river is at this part free from dangers, but as it would have made it impossible for us to go on with our observations, we eventually decided not to do so. We accordingly paddled on until it was too dark to see, and making the rafts fast to the bank, slept as well as we could at the bottom of the canoes, so as to be in readiness for starting at dawn upon the morrow. In the way of saving time the experiment was successful, and we were off again at 4. 45 A.M., reaching the hamlet of Kamakoffskaya after three hours' steady paddling. Just before arriving we awoke to the distressing fact that Verglaski was not with us, and as no one had seen him since leaving the camp of the previous night, there was but little doubt that he had been left behind. Jacof at once borrowed a canoe and went in search of him, hoping to catch us up before nightfall. Meanwhile we had breakfast and inspected the village, which, in spite of its imposing name, is a miserable, bleak-looking place, with a population of barely fifty. Perhaps it is with some latent feeling of modesty that the inhabitants have shortened Kamakoffskaya to Kamaki. The day was wretchedly cold and gloomy, and the aspect of two half-starved Kamschatdale children, clad in a tattered rag of furs, who sat shivering on a rotten old canoe which lay half-buried in the mud,

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133 did not serve in any way to render it less depressing. The village
137 appeared nearly deserted, and as there was nothing to detain us we resumed our journey without loss of time. Before noon we arrived at the Tchoaki (lit. cheeks). These are narrows about seven miles in length where the river passes through a range of hills from two to three thousand feet in height. Both entrance and exit are very sharply defined, and the stream, which above and below is about eight or nine hundred yards broad, is here narrowed to between three and four hundred. The scenery is decidedly picturesque after the monotonous miles of willow-lined banks that weary the traveller's eye in the lower part of the Kamschatka; and we were reminded somewhat of the Iron Gates on the Danube, which geographically—I do not say geologically—the Tchoaki closely resemble. But the former are on a grander scale, and the river here, in spite of its contracted width, exhibits none of the tumultuous rush of water which makes the passage of the Iron Gates so difficult to a Danube steamer.

000 In the Tchoaki we met two or three canoes coming up from Nischni Kamschatka, and learnt from them that a schooner, painted white, and with a steam launch, was lying at Ust Kamschatka—the settlement at the mouth of the river. This was a piece of information which astonished us considerably. That there should be a ship of any kind there other than the *Marchesa* was most improbable, for, as they told us, she was the first vessel that had visited the river for three years. More improbable still was it that she should be a stranger when the fact of her being painted white was taken into consideration; while the existence of a steam launch seemed finally to put the matter beyond a doubt. But on the other hand, the fact that she was said to have arrived many days before was greatly against it, and as the bar was very shallow, it seemed hardly likely that the *Marchesa*, with her draught of fifteen feet, would be able to cross it. The natives could not give us any further information, as they had not seen the vessel, and we were left in a state of doubt which no amount of discussion helped to enlighten.

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161 Emerging from the eastern entrance of the narrows we found
133 ourselves passing through a flat, uninteresting plain which extended
361 as far as the sea. Here the scenery is scarcely more interesting than that at the mouth of the Thames. A cold wind swept over the dreary reaches of the river, and behind us an ink-black sky gave warning of approaching bad weather. At 4 P.M. we passed Nischni or Lower Kamschatka, once the capital of the peninsula, a village of some importance with twenty houses and a church, and a population of 150. It lies a little way off the main river upon a smaller stream, and just opposite, upon the other bank of the Kamschatka, the Raduga, a river about forty yards wide at its mouth, flows in
000 from the south. A canoe shot out to intercept us as we passed, bringing a letter for Petropaulovsky from the Kluchi pope, who had left that village just before us on the preceding day, and shortly afterwards we saw another boat paddling hard after us. We stopped to let it approach, and soon recognised Jacof, whose gloomy face told us that Verglaski had not been found. He had apparently gone down the river for some distance, and had then turned back and proceeded towards Kluchi. Here the track had become obliterated, and Jacof had been obliged to give up the search. Poor old Verglaski; his quiet methodical ways had endeared him to all of us, and Jacof was much distressed at his loss. In the summer he would have had no difficulty in finding enough to subsist on, but at this season hardly any fish were left, and the settlements being so far apart, and upon the other side of the river, it was more than doubtful if he would ever have a chance of reaching one of them.

Paddles were once more resumed, and we were discussing the advisability of proceeding to the mouth of the river without stopping, when we perceived the smoke of a steam launch in the distance. By our glasses we soon made her out to be a stranger, and all doubts as to the arrival of the *Marchesa* were thus at an end. She proved to be the launch of the walrus-schooner *Nemo*, bound to Nischni Kamschatka. She had on board the first officer—

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000 a Swede—an agent of Mr. Phillippeus the fur-trader, and a crew of four Japanese. They told us that nothing had been seen of the

136

PALLAS'S EAGLE. (*Thalassætus pelagicus.*)

000 yacht, and could give us no news of the civilised world, having been for some time lying in the river; so, after wishing them *bon voyage*, we continued our journey.

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 The natives are prevented by law from barring the river in the
252 lower part of its course, and here the salmon are taken chiefly with
262 seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 The low and muddy shores of the river in this part of its
224 course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

133 WE WOKE ON THE MORNING OF SEPTEMBER 15TH TO A MOST MISERA-able day. We had not dug the trenches round our camp unnecessarily; the rain was coming down in torrents with a bitter wind, and we deferred our start till nearly noon. After four hours' paddling, the river, which here averages from twelve to fourteen hundred yards in breadth, widens still further opposite to the entrance of the arm leading to the Nerpitchi Lake, and sweeps round sharply to the south. Just beyond lies the village of Ust Kamschatka, in the dreariest situation it is possible to conceive; and here, cold and tired, we pulled up at 5 P.M. and established ourselves in a comfortable little hut belonging to Mr. Phillippeus, the fur-trader. Our journey was practically at an end, for we were but four miles distant from the bar at the mouth of the river.

A small look-out tower is built a little to the south of the village, and we at once ascended it to see if there were any signs of the *Marchesa*. Nothing was to be seen at first, but before long we made her out approaching from the south; and thus, after an absence of a month, we had hit off the time of meeting with an exactness as curious as it was fortunate. We were anxious to get off without delay, and the captain of the *Nemo*, with whom we had made acquaintance, offered to take us. We were soon afloat in his whaler, which was manned by a Japanese crew, and with the oars double-banked, we got over the water at a pace that was somewhat different to that to which we had been accustomed on the rafts. As we neared the river's mouth the thunder of the surf was not reassuring, and we landed to reconnoitre on the left bank, where the river, making a sharp turn before debouching into the sea, runs close to and parallel with the beach. Our men, who had preceded us with the baggage, had made a large fire of drift-wood, of which we were glad enough to take advantage, for our teeth were chattering with the cold, and the rain had recommenced. But what we could see of the bar through the darkness was not such as to induce us willingly to attempt it, and we at once decided to return.

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000 The captain of the *Nemo*, who was a Swede, and spoke English with perfect fluency, enlivened our row home with his accounts of Saghalin, from which island he had just come. It is now a Russian penal settlement, which is only used for criminals of the worst kind. The discipline adopted, according to his account, was of extreme severity, and many of the prisoners preferred to take their chance of escape, and the almost certain risk of death by starvation in the bush, rather than endure it. In one case he mentioned, two of these unfortunate wretches escaped. One was caught almost immediately, and the other returned of his own accord at the end of some days, nearly dead from starvation. He was fed up until he recovered, and 100 lashes were then administered every day until one of the men died.

361 In Ust Kamschatka, it is hardly necessary to say, there are neither gas lamps nor pavements,[1] and the state of the paths about the settlement—if paths indeed they can be called—is indescrib-
000 able at this season. The captain, who was as good an amateur doctor as he was a Samaritan, had asked me to come and see a sick woman he had been looking after, and we accordingly started at once in search of the hut. It was by no means easy to find it, and we stumbled about over stones and through swamps for some time in vain. In one of the latter my companion lost his boot, and though we expended all our matches in hunting for it, we never saw it again, and he had to see his patient in a condition that was, to say the least of it, unprofessional.

We had been bidden to a feast in the evening. To have one ship in the port was rare enough, but the presence of two was so unprecedented that it was felt that something must be done to commemorate it. A ball was accordingly resolved on. The Swedes sent various intoxicating drinks, as became their nation; and the supper-table groaned with Kamschatkan delicacies—cranberries, brick-tea, and cold ducks. The ballroom was not lofty, and the

[1] Perhaps I may be wrong. I was once asked by a lady, in all seriousness, if the hotels in New Guinea were tolerably good!

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000 attempted it on the previous night would have been foolhardy in
133 the extreme. 1At ordinary high tides it appears that there is between ten and eleven feet only in the deepest part, and R—— told us that he had had a narrow escape in getting the *Nemo*, which had a draught of ten feet six inches, into the river. She had bumped heavily once or twice. The entrance shifts constantly, and in bad or indifferent weather the bar is doubtless a very dangerous one. We arrived at the best time of the tide,[1] and were fortunate enough to get over the three big waves without even a wetting. A few minutes later we boarded the *Marchesa*, after an absence of exactly a month. We found all well, and the day passed quickly in chatting over our various adventures. The Swedes bade us adieu towards evening, and the sun was setting in a blaze of gold behind the giant pyramids of Kluchi and Kojerevska as we fired a farewell gun and stood away for Bering Island.[2]

[1] It appears that there is only one tide here in the twenty-four hours.

[2] I have adopted this, the correct orthography of the celebrated navigator's name, instead of the more usual Behring, a piece of bad spelling which, I believe, we originally borrowed from the Germans.

[at the mouth of the Kamchatka River--
analyst]

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CHAPTER X.

KAMSCHATKA.

000 Cape Klin—Walrus—Permanence of snow at the sea-level—Betchevinskaya Bay—Hunting *Ovis nivicola*—Impassability of the bush—A magnificent bag—Description and measurements of the Kamschatkan Bighorn—Natural breakwaters—Seals and bears—Lost in the bush—Return to Petropaulovsky—Unveiling of the monument to the affair of 1854—Ship's pets—Leave Avatcha Bay for the south coast—An otter-hunters' village—Method of killing the sea-otter—The peoples of the peninsula—Lamuts in Kamschatka—We leave for Japan—South-easterly gale—Encounter a typhoon—Loss of Le Gonidec—Another gale—Repair damages in Yokohama.

133 THE eastern shores of the peninsula of Kamschatka are broken by three well-marked promontories:—Capes Kamschatka, Kronotsky, and Shipunsky; and it was for the latter—the southernmost—that we shaped our course. Our friend R——, the captain of the schooner *Nemo*, had recommended this part of the coast as being the best ground for wild sheep and walrus, and though he had himself hunted it on his voyage to the mouth of the Kamschatka River, we hoped that a sufficient time had elapsed for the animals to have returned to their old quarters. Nearing the land a little to the north of Cape Shipunsky, it soon became evident that the outline of the chart of this part of the coast had been traced according to the fancy of the cartographer. Instead of a nearly straight shore devoid of dangers, we found ourselves at the entrance of a fine bay nearly two miles in depth, running in a south-westerly direction. The scenery was wild and lonely-looking to a degree, but the jagged precipices and rocky islets of which it was in great part

133 composed were less pleasing to a sailor's than an artist's eye; and it was with a certain relief that, on the return of the lifeboat we had sent to coast the shores of the bay, we learnt that no trace of walrus was to be seen. With the prospect of bad holding-ground and no shelter to speak of, we resolved on trying farther to the north, and therefore, without anchoring, made at once for Cape Klin, our original destination.

We kept within a mile or two of the land, expecting to arrive in an hour or less, for the distance between Capes Shipunsky and Klin was barely twelve miles by the chart. We found, however, that the distances were as little to be relied on as the outline of the coast, and we had logged thirty-six miles before stopping the
000 engines abreast of the cape. We rowed along the beach in vain in search of the game. Not a walrus was to be seen, but on nearing a little group of rocks we noticed a large mass lying upon the beach, and landed to find ourselves in the midst of a scene of slaughter which sufficiently accounted for the absence of our quarry. The crew of the schooner had evidently had good sport, for the shore was dotted here and there with the bodies of the slain, which were blown out to a gigantic size by decomposition. That there were still plenty of walrus in the neighbourhood was evident, for on our return to the ship the animals played in numbers around the boat; but, unlike the fur seal, they will not "haul up" on the shores where others of their species have been killed, and we had therefore to give up all hope of obtaining them at Cape Klin. The walrus restricts itself more or less to certain favourite spots for landing, and a random search for them along the coast would have been attended with but little success. It is nearly impossible to kill them in the water except by harpooning, for the only fatal shot—a small spot at the nape of the neck—is very rarely obtainable, and the animal, if struck there, usually sinks at once.

132 Our search having thus proved fruitless, there was nothing left
133 for us but to return to the neighbourhood of Cape Shipunsky, in the hope of obtaining some of the bighorn or mountain-sheep

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132 which, according to Jacof Ivanovitch, were to be found there in
133 abundance. A few years previously he had visited Betchevinskaya Bay, a deep inlet ten miles to the west of the cape, and had shot several; and since, according to his account, both anchorage and shelter were to be had—a not unimportant consideration on such a coast—we again steered southward, and keeping a good offing during the night, ran in to the land and picked up our position off Cape Shipunsky at daybreak. The coast is steep-to, and as we passed close to the fine cliffs and headlands which oppose the by no means tranquil Pacific, there lay the *neiges d'antan* bewailed of Maistre François Villon,—huge patches of last year's snow, choking the gullies down to the water's edge. That they should have remained throughout the hot summer in a south-east aspect was astonishing, and gave some idea of the severity of the climate in these latitudes, but the absence of the usual autumnal rains no doubt in great measure accounted for it.

133 Before reaching our anchorage just within the entrance of the
137 bay, we could distinctly make out small herds of the animals of which we were in search on the slopes of the cliffs, which here rose to a height of five or six hundred feet, precipitous in some places, but in others forming a sort of under-cliff covered with brushwood. We lost no time in settling our plan of action. Judging that the bighorn were confined to the promontory near which we had anchored, we resolved upon surrounding it, sending four guns to the top of the cliff, whose sea-face extended east and west for a distance of about three miles, and posting two others upon the beach below. The former, ascending in rear from the shores of the bay, reached their destinations with some difficulty, the undergrowth being so dense and strong that, but for the bear-paths with which it was cut up in all directions, it would have been impenetrable. At the edge of the cliff progression was somewhat easier, and on looking over we found ourselves in close proximity to the game.
000 Owing to the excitability of Jacof, who had got some distance ahead, we began the day in a manner I hardly like to recall. The

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000 wretched Russian, totally oblivious of the fact that the bighorn were possessed of quite as good eyes and ears as ourselves, danced wildly at the cliff's edge, shouting and gesticulating for us to come on. Struggling madly through the dense brushwood, hot, panting, minus portions of our clothing, and with rage at our hearts, we arrived just in time to get a couple of ineffectual shots as the game disappeared round a corner. My sporting readers will have little difficulty in realising our feelings; and as it was evident that Jacof's *forte* lay rather in hunting sables than other game, we at once sent him, like the unlucky commoner in Mr. Punch's aristocratic battue, to "take the chance of a hare back." We felt that after such a fiasco we could hardly expect or deserve success.

The fates, however, were more propitious than the most sanguine of us had dared to hope. Before mid-day I had bagged three bighorn, and, as I afterwards learnt, most of the other guns had been nearly as fortunate. Anxious to get the game on board before nightfall, I started for the yacht, and wishing to save myself the long round by the top of the cliff, attempted to cross an intervening belt of fir-scrub in order to reach some open grassy ground farther inland. I soon found that the task was far more difficult than I had imagined. The thicket was of old growth, and covered the ground breast-high, the surface everywhere being perfectly level. Contrary to what is usually seen near a coast, the branches grew seawards, and interlacing in every direction, formed a dense mat through which it was almost impossible to force one's way. I had barely gone ten yards before I became jammed in a position from which I extricated myself only with the very greatest difficulty. As I progressed the bush became, if anything, more impassable. Cumbered with a heavy rifle, and already somewhat tired with the morning's exertions, I got gradually more and more exhausted. My legs became constantly wedged in the forks of the branches which were too tough to break, and with my feet scarcely ever upon the ground, I fell again and again, lying where I fell from sheer fatigue. The little strip of bush was barely a hundred yards

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000 across, yet, absurd as it may seem to those of my readers who have had no experience of the denseness and impassability of the vegetation in these and similar regions, I more than once wondered if I should ever get through. I have certainly never been more completely exhausted than when I finished the last yard and rolled helplessly upon the grass on the other side.

After a rest on board the yacht I rowed along the coast to pick up the game, two of which had rolled down five or six hundred feet upon the beach below. Passing beneath the cliff at the entrance of the bay, we witnessed the death of a bighorn under unusual circumstances, for the animals are in general as sure-footed as a chamois. A couple of them had been driven into a corner by some of our party at the top of the cliff, but one broke back almost immediately. The other, perched on a little pinnacle at the edge of the precipice, seemed about to follow its comrade, but hesitated, turned, and ran back. As it did so its foot slipped. It checked itself for a moment, slipped again, made one desperate effort to regain its footing, and was over in an instant. The creature never moved a muscle as it fell, and hit the rocks four hundred feet below with a dull scrunching thud, breaking one of the massive horns short off, and converting the hind quarters into a shapeless, bleeding pulp.

Before dusk we had got on board no less than nine bighorn, and the yacht's decks were more like a butcher's shop at Christmas than anything else. We were busily engaged in measuring, skinning, and weighing during the evening, and when, wearied with the day's exertions, we turned in for a well-earned night's rest, we looked forward to the prospect of equally good sport on the morrow.

136 The general colour of the Kamschatkan Wild Sheep (*Ovis nivicola*, Eschscholtz) is a brownish grey, and the hair of those we obtained was very long and thick, so much so that we concluded that the animals had assumed their winter coat. The head and neck are more distinctly grey than the rest of the body, the forehead

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136 is marked with an ill-defined dark patch, and the lips are nearly white. On the anterior aspect the legs are of a dark glossy brown, but posteriorly a narrow white line runs down the entire length

KAMSCHATKAN BIGHORN. (*Ovis nivicola.*)

of the limb. The tail is short and dark brown; the rump and the centre of the belly pure white. The ears are remarkably short.[1]

The Bighorn in Kamschatka appears especially to frequent the

[1] Sir Victor and Mr. Basil Brooke in their article on Asiatic Sheep in the "Proceedings of the Zoological Society" (1875, p. 509), remark on the resemblance of the horns of this species to those of the American Bighorn (*Ovis montana*), with which, indeed, it has by some naturalists been regarded as identical. But the uniformly smaller size of the head, the shortness and great breadth of the skull in its anterior aspect, the slight development of the pre-orbital fossa, and the protuberance of the orbit itself, serve markedly to distinguish the Kamschatkan species. The horns are less rugose than those of *O. montana;* their frontal surface is convex; the orbital surface at first concave, then flat, thus causing the fronto-orbital edge to be very sharp. The nuchal surface is convex, and afterwards flattened, and the two remaining edges are rounded.

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136 precipitous slopes of the sea-cliffs, though it is met with in some numbers in the interior of the peninsula. We had evidence of its occurrence in the mountain ranges near Gunal and Narchiki in the

SKULL OF *Ovis Nivicola.*

The following are the measurements obtained from a series of nine skulls :—

	Inches.								
Length of skull	10½	10½	9¾	10¼	10¾	9¾	10½	10¼	...
Breadth between orbits . . .	5¾	5¾	4¾	5½	5¾	5½	5½	5¼	...
Length of horns round curve . .	35	34¾	24	32¼	35½	38	32½	26½	35
Circumference of horns at base .	13¼	14½	13	14	14	13½	13¾	12½	13¼
Horns from tip to tip . . .	21	25	17½	21	26¾	26	22½	21½	25½

Measurements in the flesh of twelve specimens, all of which were adult males, were also taken, and are as follows :—

Supposed age (years)	3	3	5	5	5	5	6	6	6	6	6	6
Extreme length .	65½	63	62	64	64	66	66	65	66	66	67	67
Greatest girth . .	53	53	56	54	55	...	56½	...	54	53	54	55
Height at shoulder .	38	39	38	39½	37	...	40	41	40	37	40½	39

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136 Bolcheresk Valley, and it probably exists at low altitudes on the great volcanoes near the mouth of the Kamschatka River. Every one of those we shot was a male,—their ages ranging, as far as we could judge, from three to six years. They kept in small herds of from three to nine individuals. As in the case of others of the same genus, the females and young males doubtless keep apart, but we were not fortunate enough to discover their habitat, neither could we obtain any information about them from the natives.[1]

Early next morning the most enthusiastic of our party proceeded in the lifeboat to the ground of the preceding day, hoping to add still further to the bag, while two of us started to explore the
133 magnificent harbour at the entrance of which we lay. Betche-
136 vinskaya Bay, the position and extent of which is but roughly indicated in the Russian charts, is a narrow inlet some five miles in depth, girt with precipitous cliffs of three or four hundred feet for the seaward third of its extent. At this point two low and narrow strips of beach run out from the base of the cliffs on either side, leaving a passage barely fifty yards in width in the very centre of the fjord, but deep enough to admit a vessel of the largest size. Within this the cliffs disappear, and an extensive and perfectly land-locked basin is entered, surrounded by high hills sloping gradually to the water's edge—as good a harbour as it is possible to imagine. Of the mode of formation of the two promontories I have just alluded to I can offer no explanation. They are so unnatural in appearance, and so closely resemble artificial breakwaters, as at once to attract the notice of the most careless observer. The long spit of beach running out at the entrance of Petropaulovsky harbour is of exactly similar formation, and the same phenomenon is said to occur at other places along the coast. Nature is not very lavish of her harbours on these shores, but the few that exist are excellent.

As we entered, the placid surface of the inner basin was dotted in every direction by the square black heads of seals, of which

[1] Cf. article by the author *On Ovis nivicola*, "Proc. Zool. Soc.," 1885, p. 675.

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133 there appeared to be enormous numbers. But as we intended to
136 try for bear at the head of the bay we left them in peace. The wind, however, sprang up and blew directly inland, and all chance of sport being under these circumstances reduced to a minimum, we reluctantly returned. That bear were very abundant in the neighbourhood was evident from the numberless fresh tracks, and from the fact that we saw seven in two days, but owing to their shyness and the dense undergrowth they frequent, they are not easy to shoot. We had therefore to turn our attention to the seals, whose skins Jacof seemed anxious to obtain. They were the ordinary *Phoca vitulina* of our own coasts, or a very closely-allied species.

Landing on the natural breakwater on our way back, we were astonished to find a spring of fresh water close to its extremity. The pools formed by it were covered with teal and other duck, and with these and a stray golden plover or two we had good sport. The place seemed to be a favourite resort of bears, who had formed
000 numerous paths to the spring; but ill-fortune once more attended us, and we had to be content with a distant view of one of these animals, who made off at full speed. We returned to the *Marchesa* to find that considerable additions had been made to the bag by the other party. Four more *Ovis nivicola* and a walrus had been killed, the latter carrying very fine tusks, nearly two feet in length. Hunting these creatures is after all but a sorry business. In order to afford sport an animal should either fight or run away. The poor walrus does neither—at least to any purpose—and having once killed one, no sportsman would care to repeat the performance.

I have been led to describe the events of our two days' visit to Betchevinskaya Bay as an illustration of the abundant sport to be obtained in Kamschatka. Our total bag consisted of one walrus, fourteen bighorn (one, falling in an inaccessible place, was not brought in), and some seals, besides teal, duck, and golden plover. Had we been ordinarily fortunate we should also have obtained two bears, which, though badly hit, managed, owing to the

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000 Long before the huge paw had descended in a futile effort at revenge the little rascal was safely under cover, on the look-out for another opportunity, and the bear might just as well have attempted to catch a mosquito. A more thorough little pickle never existed, but, like all pickles, he was very popular, and when one morning he disappeared never to return there was great lamentation among our men. We never learnt his fate. Probably Misky had caught his tormentor after many months of vain endeavour, and had dined off him.

We left Petropaulovsky on September 26th with the intention of visiting the coast towards Cape Lopatka. Even as far south as Avatcha Bay the nights had become bitterly cold, and warned us to take our departure if we meant to avoid the heavy gales that visit these latitudes at the onset of winter. We steamed out of the harbour over a sea so calm that the glare of golden light which lit up the western sky was reflected in its surface as in a mirror. Never had the bay and its grand volcanoes looked more beautiful, and we stood watching the blaze of colour fading over the yellow birch-clad hills and the lonely pyramids of snow beyond until the last ray of daylight had disappeared and the full moon had turned the landscape to a harmony in black and silver.

361 Next morning a thick fog hid the coast from view, but cleared
133 as the sun got up, and we were able to pick up our position. About
501 noon we found ourselves off an island abreast of the Itterna Volcano, and steaming into a bay close by, we scanned the coast for signs of a sea-otter-hunters' village, of whose existence we had heard through Afanasi. Not a trace of it was to be seen, and we were beginning to think that we had misinterpreted our directions when a couple of little canoes shot out from behind a point and paddled towards us at a great rate. As these neared the ship we saw that they were built somewhat on the model of a Greenlander's *kayack*, although not broader than the narrowest of Thames cedar-wood canoes. How they can live in any ordinary sea is little short of miraculous, but we afterwards learnt from the people that two

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501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

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501 framework of the slightest possible description, covered with the skin of the Sea-Lion (*Eumetopias*), beautifully sewn. The circular opening for the occupant is very small, and the ingress of water is prevented by a sack-like skin apron which is tightly tied beneath the arms. These craft are astonishingly crank, so much so that one of our party, by no means a tyro in such matters, found the greatest

OTTER-HUNTER'S CANOE, POWELL ISLAND.

possible difficulty in sitting one, even in smooth water. They are made in three sizes,—for one, two, or three persons.

000 We entered into negotiations for the purchase of one of these boats, as well as our want of a common language permitted. Vodky —the curse of Kamschatka—was the one idea of the natives, and we might doubtless have bought the craft, furnished with bow and arrows and all necessary gear, for three or four bottles of this spirit, had we felt inclined, for these people would sell their very souls for brandy were they only marketable commodities. The bargain was concluded eventually for thirty roubles, but though the dealing in money saved our consciences, it probably came to much the same in the end as if we ourselves had supplied the natives with spirit. Directly the snow was sufficiently hard for sledging, the owner of

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000 the roubles would no doubt start for Petropaulovsky, and turn them into vodky without loss of time.

144 We could make out nothing about the nationality of the people of this village. We had been told that some Aleuts from the Bering group had settled in this neighbourhood, but it seems that the Kurile islanders have also passed northward, and established themselves on the coast near Cape Lopatka. To us it appeared that they did not differ appreciably from the Kamschatdale type, but the opinion of a mere passer-by on these matters is usually valueless. Nothing certain is at present known of the origin of the Kamschatdales and Koriaks—the aboriginal tribes of the peninsula. Both appear to have become greatly reduced in numbers since the Russian conquest. As a pure race the Kamschatdales are now rare, except on the western side of the country. The Koriaks rarely or never come south of the Tigil River. They are a nomad race like the Lapps, owning reindeer and living in movable tents, and, like them, coming down to the lower ground in winter. Both these tribes belong to the "Hyperborean" unclassified group, and Mr. Keane[1] considers the Koriak as probably the parent stock of the sub-arctic races of this part of the globe. Their language as shown by the vocabulary of M. de Lesseps, although bearing but a faint resemblance to the Kamschatdale, is closely allied to that of the Tchuktchi tribe in the region of the Anadyr, and it is possible that, ethnically as well as geographically, they form a connecting link between these two latter peoples.[2]

563 I am not aware that the presence of Lamuts in Kamschatka has ever been recorded by previous writers, but while on our journey through the country we were told by Afanasi Waren

144 [1] "Asia." Stanford's Compendium of Geography and Travel.

167 [2] The accidental immigration of Japanese must be regarded as a not unimportant factor in the composition of the Kamschatdale race. Short as is the period that has elapsed since the Russian conquest, it has furnished several instances, recorded by Krasheninikov, of Japanese junks having been driven from their course and wrecked on the shores of the peninsula. This chance peopling of the country has, no doubt, been going on for centuries, and it is probable that but few of the immigrants ever regained their native land.

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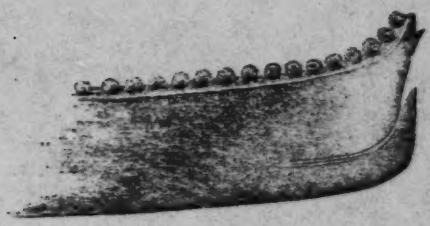
563 who was well acquainted with both the Koriaks and Kamschatdales, that a small number of this race lived in the mountains in the heart of the peninsula. He described them as a fjell people, great hunters of *Ovis nivicola*, and owning reindeer, which they occasionally brought in for sale to Melcova and other places on the Kamschatka River. That the Lamuts, who are of Tungus race, should have established themselves in such an isolated position is curious, but we had no reason to doubt the accuracy of Afanasi's information. De Lesseps in his "Travels in Kamschatka" gives a vocabulary of the Lamut language, but, as he mentions nothing of this people in the peninsula, it is most probable that it was obtained in passing through their country in the neighbourhood of Okhotsk and the Judoma River, on his return to St. Petersburg.



BOW OF KURILE CANOE.

000 On the 27th we bade a final adieu to Kamschatka. We had more belief in the cold southerly current than in the continuation northwards of the Kurosiwo, of which we had vainly endeavoured to take advantage in our voyage from Japan; and we accordingly set our course for that country so as to keep a few miles only to the eastward of the Kurile chain. Had we known what was before us we should probably have given the land a wider berth. We had no idea that we were destined to come in for two gales and a typhoon before we reached the welcome shelter of Yedo Bay.

We steamed on quietly enough against light to moderate southerly winds until the morning of September 29th, when we experienced a gale from the south-east, which increased in force as the day wore on. At 6 P.M. we altered course, and stood in towards Simusir Island until midnight; a high sea running and the vessel pitching heavily. The wind then slackening somewhat, and veering

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000 The history of the further conquest of Siberia is of no very great interest. Shortly after the arrival of the Czar's forces Yermac was surprised by a body of Kuchum Khan's adherents, and was drowned in his attempt to escape, and the Russians were for the time being driven out of the country. It was only for a brief period. They returned in greater strength, and rapidly reduced the Tartars to submission. Thenceforward their progress eastward was almost unchecked. The rude tribes were unable to stand against the superior discipline and arms of the more civilised nation, and in less than a century the Muscovite and the Celestial faced one another in the provinces of the Amoor. The hostilities that ensued were not of long duration. The Czar was wise enough to foresee that a protracted war with such a powerful nation as the Chinese could by no possibility end in his favour, and ultimately a treaty was signed at Nerchinsk in 1689, by which a system of commerce was established between the two nations, and the advance of the Russians checked in south-east Siberia.

175 R 177 .17 No such check had, however, occurred in the north-east, and even before the Nerchinsk Treaty the Russians had established themselves at Anadyrsk,—practically, although not actually, the Ultima Thule of the Asiatic continent. Here a fort was built, and a governor appointed, who was instructed to collect the tribute of furs from the natives, and to inform himself of the countries beyond and to the south of his district. At that time the half-fabulous Strait of Anian was the supposed boundary of Asia, and Kamschatka, of which the Russians had only dimly heard through the medium of the natives, was believed to be joined to the northern portion of Japan. The existence of Bering's Straits was not proved until nearly forty years later, but hardly a tenth of that time had elapsed before the Cossack troops had penetrated the peninsula and built a fort at Werchni Kamschatka, in the very heart of the country.

To whom the honour of the actual discovery of Kamschatka is due is a disputed point, but the claims of one Theodot, a Russian

[in 1689--analyst]

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trader, seem to rest upon something more than mere tradition. This individual is said to have sailed down the Bova River to the Polar Sea, and to have made his way thence by way of Bering's Straits to Kamschatka. Here he wintered, and in the following summer rounded the southern point of the peninsula, and entered the Sea of Okhotsk. He is said to have been killed by the Koriaks on his return overland to Anadyrsk, or to have died of scurvy, but the accounts of the expedition are both scanty and uncertain, and nothing was known of the country he was said to have discovered until the end of the seventeenth century.

In 1697 Vladimir Atlasov was sent from Yakutsk to take the command of the district of Anadyrsk, and in the following year he despatched Luke Moroskoi, a Cossack, with a guard of sixteen friendly natives, to collect the tribute from the country lying to the south. On their return they reported that they had penetrated the north of Kamschatka, and Atlasov, tempted by their description of the country, resolved on conquering it without delay. He accordingly started with a force of sixty Cossacks and about the same number of natives, and sending half under Moroskoi towards the Pacific, he marched southwards to the River Tigil. He met with but slight resistance from the Kamschatkans themselves, but his own natives revolted, and killing three of his Cossacks and wounding several others, they were with difficulty overpowered. Atlasov effectually prevented the recurrence of such an event by putting the remaining rebels to death, and notwithstanding the greatly reduced number of his followers, eventually reached Tigil, where he effected a junction with the second party under Moroskoi. The indomitable courage and resolution with which this mere handful of men ventured into the midst of a hostile nation, in a country which is one of the wildest and most impassable in the world, is worthy of the highest admiration. In spite of having reduced the tribes at the north of the peninsula, they had no thought of return. From Tigil they marched to the Kamschatka River, and ascending it almost to its source, built a fort upon its banks,

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where the village of Werchni Kamschatka now stands. This was garrisoned with fifteen Cossacks, and the remainder of the force returned in safety to Anadyrsk after an absence of two years.

The tribute obtained as the result of this expedition was a very valuable one, consisting of over three thousand sables in addition to other furs. This booty Atlasov himself conveyed to Moscow, and, as a reward for his services, was made Chief of the Cossacks at Yakutsk, and ordered to return at once to Kamschatka. Unfortunately for him, he fell into temptation by the way. A Russian merchant was unlucky enough to meet his party, and proved too tempting a morsel for the conqueror of the peninsula. The predatory instinct prevailed, and Atlasov eased him of the Chinese goods with which he was returning laden. Justice, however, seems in this case to have overtaken the delinquent rather more rapidly than is usual in the dominions of the Czar. He was at once seized and thrown into prison, where he remained for nearly five years.

During this period affairs in the newly-conquered country were by no means progressing as smoothly as might have been expected from the ease with which it had been annexed. Forts had been built both on the Yelofka River and where Nischni Kamschatka now stands, but the natives had given much trouble, and had killed several of the tax-gatherers, while the garrison of the upper fort, after remaining there for three years, had been murdered to a man on their homeward march to Anadyrsk. Upon the return of Atlasov, however,—for he had been invested with full authority, as before, on his release from prison in 1705,—a force was at once despatched to punish the rebels, and the Cossacks for the first time appear to have reached Avatcha Bay, where they encountered a body of eight hundred Kamschatdales. Certain of victory, the latter had provided themselves with ropes to secure their prisoners, but though the Cossacks were taken by surprise and greatly outnumbered, they eventually gained the day, and the natives were put to flight with great slaughter.

The Russians were now permanently established in the

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peninsula, and as they had been much increased in strength by reinforcements sent from Yakutsk, the tribute levied on the natives became more valuable. But the lawless nature of the Cossacks effectually prevented a peaceful settlement of the country. Atlasov, who was probably no worse a character than his subordinates, openly appropriated the Government tribute, and was guilty of such gross cruelties to the natives and his own Cossacks that the latter seized and imprisoned him in 1707. Intelligence of the rebellion having reached the Yakutsk authorities, Peter Tcherekov was at once despatched to restore order, but the difficulties of travel and other causes combined to delay him, and it was not until two years later that he reached Kamschatka. Shortly afterwards he was joined by Joseph Mieronov, who had been sent to supersede him; and thus, in 1711, there were no less than three governors in the country at the same time. This *embarras* of rulers did not trouble the mutineers long. Tcherekov and Mieronov were murdered by their Cossack guard, and Atlasov met his fate at the hands of his own men—a punishment which, it must be confessed, he only too richly deserved.

The mutiny was indirectly the cause of further discoveries in the peninsula. The Cossacks became so afraid of the consequences of their crimes that they resolved, if possible, to expiate them in the eyes of the authorities by marching against the natives in the south-west, who had hitherto refused to pay tribute. At the same time they sent a letter to Yakutsk, accusing the murdered men of having systematically embezzled the tribute. Their expedition was completely successful. They descended the Bolchaia-reka, destroyed several of the fortified villages, killed great numbers of the natives, and finally built a fort upon the present site of the settlement of Bolcheresk. The natives were thus completely reduced, and the mutineers added further to the knowledge of the country by visiting the most northern of the Kurile Islands—on which no Russian had ever previously landed—and compelling the inhabitants to pay tribute.

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Onsiforov, the ringleader of the mutineers, returned to the Kamschatka River in 1712, and partly in consequence of these services, partly, no doubt, because of the strong force by which he was attended, his various misdeeds were passed over in silence, and he was again employed in expeditions against the natives. The country was at this time in a condition of the greatest insecurity. The Cossacks, under little or no control, killed and pillaged the Kamschatdales at every opportunity, and the tax-gatherers were constantly murdered in retaliation. Frequent mutinies took place, and from the state of anarchy into which the country had fallen, no tribute reached Yakutsk between the years 1707 and 1714. The exploration of the country nevertheless continued. More of the Kurile Islands were discovered, and in 1715 communication by sea was established between the ports of Okhotsk and Bolcheresk, which led to the discontinuance of the overland route to Yakutsk *viâ* Anadyrsk. Not only was the former far more direct and rapid, but it was also attended with much less risk; the attacks of the hostile Koriaks and Tchuktchis, which rendered the sledge journey extremely dangerous, being thereby avoided.

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Hitherto the attention of the Russians had chiefly been engaged in the investigation of the country lying to the south of Anadyrsk. But the question of the continuity of Asia and America had long been occupying the mind of Peter the Great, who was at that time Czar, and he resolved that an expedition should be undertaken with that aim. Accordingly, with his own hand, he drew up instructions, in which he ordered that ships should be constructed in Kamschatka, that they should direct their course northwards with the object of setting at rest the question of the existence of a strait between the two continents, and that they should endeavour to extend the Russian dominions wherever possible. Before further action had been taken the reign of Peter the Great was terminated by death, but the Empress Catherine, on coming to the throne, at once proceeded to carry out the instructions of the Czar. In 1725 the first expedition started, and Bering

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commenced his career as a discoverer, which was destined sixteen years later to be brought to such a melancholy end on the island that now bears his name.

Vitus Bering, a Dane born in Jutland in 1680, who had been for many years in the Russian service, was chosen as leader of the expedition. He had already made voyages both in the East and West Indies before seeking his fortune under the Czar, and had afterwards made himself conspicuous during the Swedish war, for which he had been promoted. Martin Spangberg and Alexei Tschirikov accompanied him as lieutenants, and the party, having been provided with a number of skilled workmen for the construction of the vessels upon their arrival in Kamschatka, set out from St. Petersburg on the 5th of February, 1725. The spring and summer were passed in making their way eastward by the Irtish, Obi, and Yenisei, and they finally went into winter quarters at Ilimsk to the north of Lake Baikal, where they collected stores in readiness for the continuing of their journey on the breaking up of the ice. The spring of 1726 found them at Yakutsk, where, owing to the difficulties of the roads and lack of sufficient transport, they were obliged to divide forces in order to reach Okhotsk. Spangberg took the river route by the Aldan, Maja, and Judoma with the heavy baggage; Bering went by land; and Alexei Tschirikov followed later with the rest of the enormous supply of provisions, with which the nature of the country whence they were to sail obliged them to burden themselves. Bering reached his destination safely, but misfortune befell the river party from the very beginning. Owing to the weight of their baggage and the rapidity of the current, the ascent of the stream was a matter of much greater difficulty than had been anticipated, and at the end of October Spangberg was caught by the ice in the Judoma River, and compelled to undertake the rest of the journey by land. Not only was the duration of the expedition thus much lengthened, but the party underwent such terrible privations that they were reduced to living upon their boots and leathern belts. It was not until July,

22: Guillemard T-2 (1882) 1886 Kamchadal

000 1727, that the whole of the *personnel* and baggage of the expedition were once more together in Okhotsk.

Meanwhile Bering, who had arrived in the previous summer, had not been idle. The route by sea across the Gulf of Okhotsk to Bolcheresk had been decided on, but there was no vessel in which to make the passage. Undaunted by the difficulties which encountered him, Bering set to work to build a craft with the aid of the carpenters he had brought with him from Russia. It was christened the *Fortune*, and at the end of June was ready to convey the first detachment of the expedition to Kamschatka. This consisted of the shipbuilders and others needed for the construction of the vessel intended for his great voyage, and on their arrival at Bolcheresk they at once proceeded to the mouth of the Kamschatka River, where she was to be built. Bering himself followed later, and travelling by dog-sledge, ultimately reached Nischni Kamschatka at the close of the year. The winter was employed in the preparation of timbers for the vessel; her construction proceeded rapidly during the spring, and on the 20th of July, 1728—three years and a half after the expedition had left St. Petersburg—Bering's first voyage of discovery commenced.

The results of that voyage are too well known to need a lengthy repetition. Clearing the mouth of the Kamschatka River, the course of the *Gabriel* was set to the north-east along the Asiatic coast, which was roughly charted. On the 10th of August the island of St. Lawrence was discovered, and five days later they rounded a cape in Lat. 67° 18′ N.,—now Cape Serdze Kamen. Here the coast trended suddenly to the west, and concluding from this, and from the fact that no land was to be seen to the north, that he had proved the existence of a strait between the two great continents, Bering ordered the return. On the 20th of September the *Gabriel* once more entered the mouth of the Kamschatka River.

For the second time the members of the expedition went into winter-quarters at Nischni Kamschatka, resolving, if possible, again

22: Guillemard T-2 (1882) 1886 Kamchadal

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to examine the shores of the supposed straits as soon as they should be free of ice in the following summer. They left the river for this object on the 5th of June, 1729, but owing to the continued prevalence of strong north-east winds, against which the *Gabriel* could make no headway, the main idea of the voyage was abandoned, and Bering made for Okhotsk, whence he proceeded overland to St. Petersburg. His second voyage was thus neither successful nor disastrous. The third, and final one, was both.

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It was during the absence of Bering that an event occurred which, but for a fortunate accident, would in all probability have resulted in the murder of every Russian in Kamschatka. The natives had for a long time cherished the idea of ridding themselves of their conquerors by a preconcerted rising throughout the country. In 1731 a more favourable opportunity presented itself than they could have anticipated. The departure of Bering and his people had cleared the Kamschatka of the most formidable body of their enemies, and the Russian forces in the peninsula had been still further weakened by the absence of a great number of Cossacks, who, under Captain Paulutsky, had been sent to the north to suppress a rebellion of the Tchuktchis. At the same time the commissary Shacurdin sailed from the Kamschatka River for Anadyrsk in charge of the annual tribute. The moment was seized by the Kamschatdales, who throughout the country were in readiness for the revolt. They sailed up the river, killing every Cossack they encountered, and Nischni Kamschatka was carried in the night by surprise. Every soul was massacred, with the exception of two or three who made their escape under cover of the darkness, and paddling down the river, eventually reached the coast. Here, to their great joy, they found the two vessels which had left for Anadyrsk, but had been compelled to return by strong head winds. Measures were immediately taken to regain possession of the fort. The leaders of the rebellion were Harchin —a Toyune or chief of the Yelofka River district—and a Kluchi Kamschatdale named Chugotchi. The village of Nischni had fallen

22: Guillemard T-2 (1882) 1886 Kamchadal

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to Harchin's forces, and Chugotchi, having murdered all the Russians in his own district, marched to join him. Hearing of the return of Shacurdin's ships, they entrenched themselves in the fort and awaited the Russian attack. It would have been better for them had they accepted the terms offered by their opponents, but they refused to surrender. The place was retaken with great slaughter. Hardly a man escaped alive, and thus the revolt, which at one time bid fair to spread throughout the peninsula, was checked almost at its outset. It was the last struggle engaged in by the natives, and thenceforward the country remained in a condition of uninterrupted peace.

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It was not until 1732 that proposals were made for the despatch of another exploring expedition to the far east. They emanated from Bering himself, who, with his two lieutenants Spangberg and Tschirikov, was anxious to push across to the American coast, and trace it northward to the strait that now bears his name. Another point too remained to be elucidated. To the south-east of Kamschatka in the charts of Delisle and others of that day an appearance of land was indicated, and described "*Terre vue par Jean de Gama, Indien, en allant de la Chine à la nouvelle Espagne.*" It was intended to search for this mythical land before proceeding to America,—an intention that, unluckily for the fate of the explorer and his comrades, was ultimately carried out,—and emboldened by the success of his earlier voyages, Bering ventured to lay his proposals before the Empress.

They were at once acceded to, and Anne, who appears to have been as anxious to extend the dominions of Russia as her predecessor, resolved upon a simultaneous system of exploration over a vast extent of country. Special attention was to be directed to the possibilities of a north-east passage along the coasts of the Polar Sea. Eight additional lieutenants were appointed, of whom three were to be engaged in this work. Spangberg was to proceed to Okhotsk, where two ships were to be built to enable him to reach Japan, while the two needed for Bering's voyage were also to be

22: Guillemard T-2 (1882) 1886 Kamchadal

MAPS.

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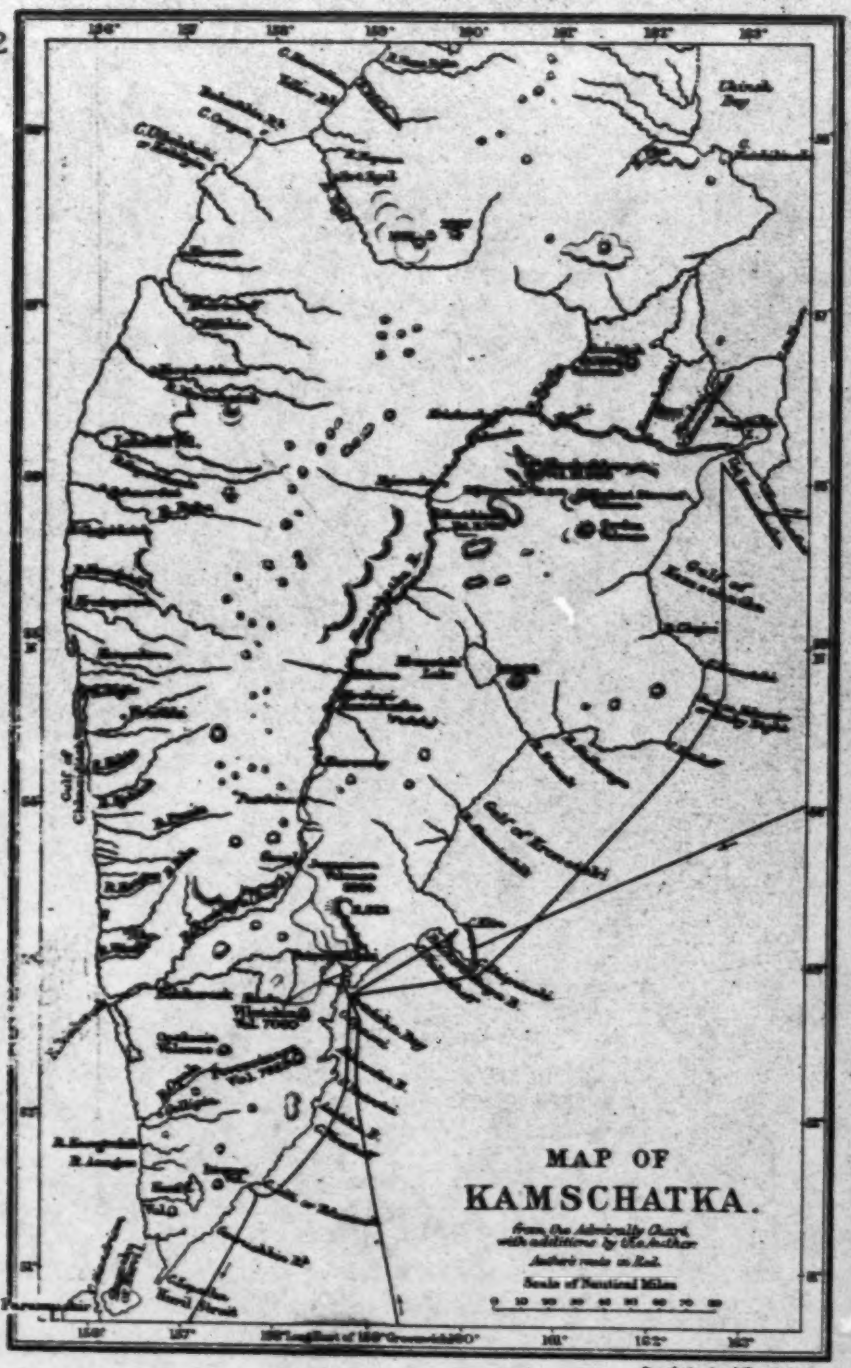

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22: Guillemard T-2 (1882) 1896 Komenadal

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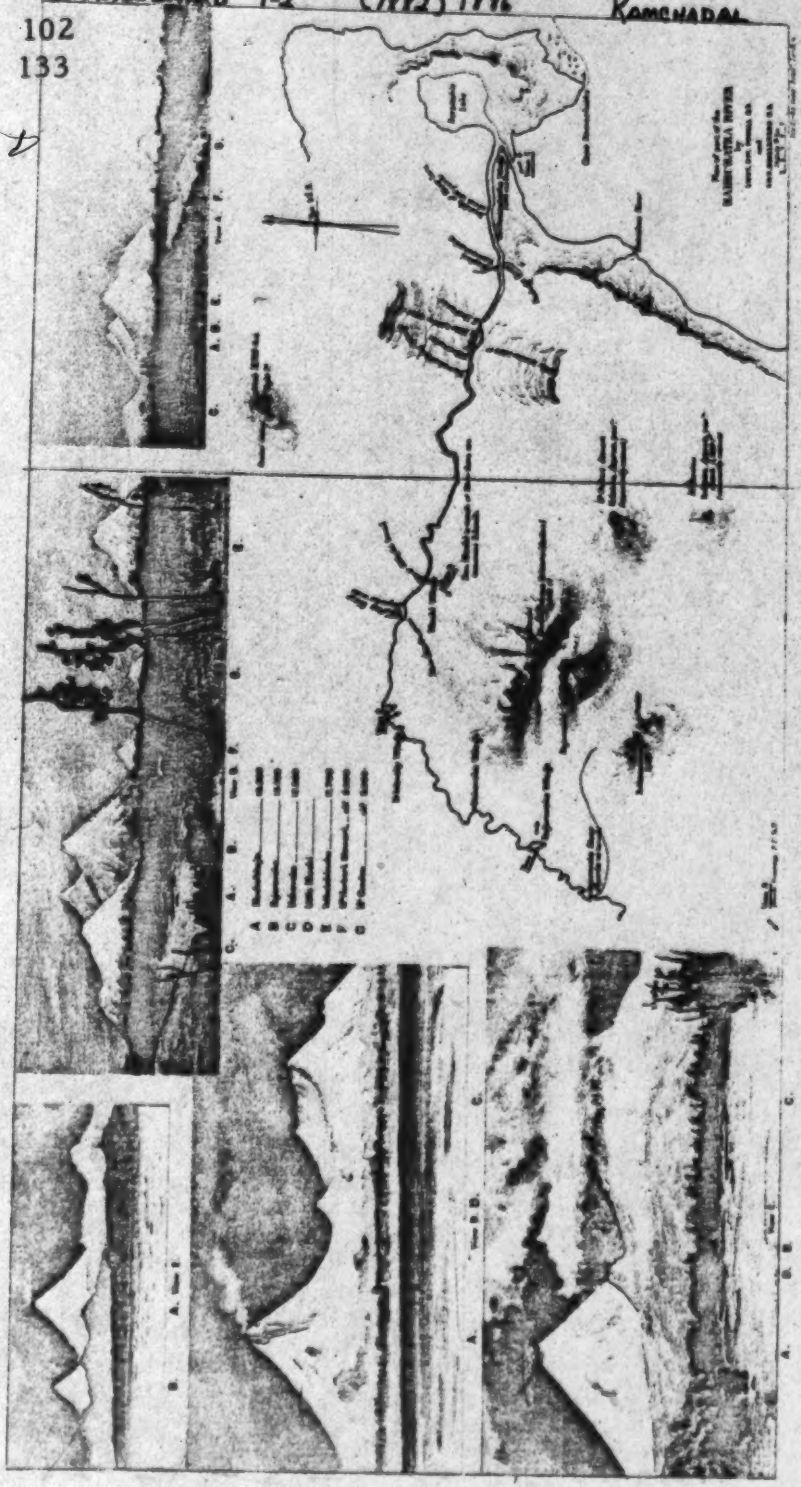
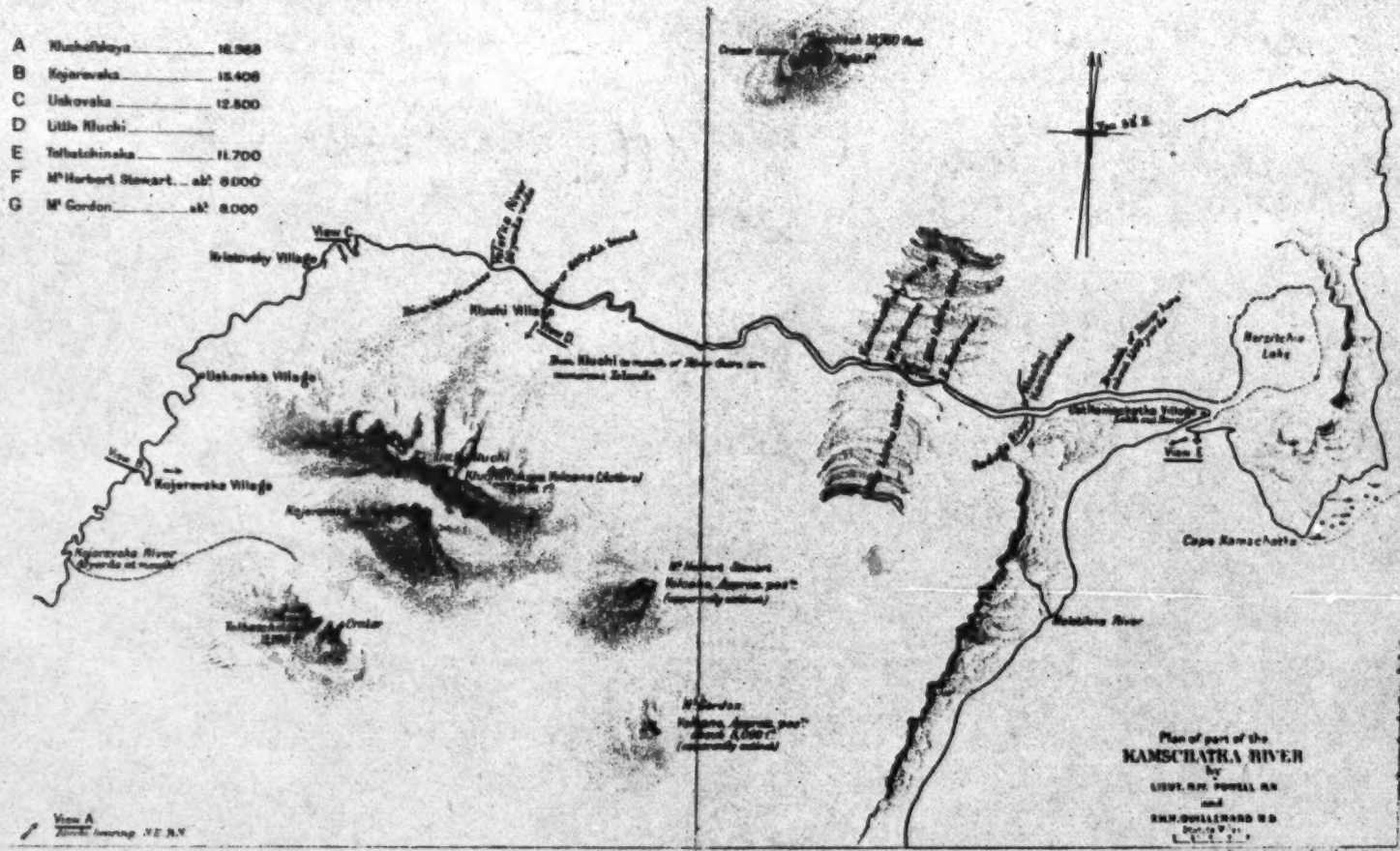


24: Guillemard Tr. (1894) 1896 Kamchadal



24: Lansdell--634-635 M-2 (1879) 1882 Kamchadal-1-3
116, 131, 133

"The traveller who, from Okhotsk, wishes to visit Kamchatka may reach Petropavlovsk by sea through the Kuriles, or continue round the coast by road. The latter course takes him through Yamsk to Ghijiga, at the north of the bay, a distance of 1,100 miles. He then descends along the western coast of Kamchatka to Tigil, 760 miles further, at which point he strikes inland to a valley lying below active volcanoes, and so reaches Petropavlovsk, on the shore of the North Pacific, a land journey from Okhotsk of 2,540 miles, accomplished by deer, horses, and dogs.

Kamchatka is so called after the name of its principal river. The peninsula is 800 miles long, and from 30 to 120 miles wide; its total area being about 80,000 square miles, or five times the size of Switzerland. The southern extremity, called Cape Lopatka, is a low, narrow tongue of land, which, as it proceeds northwards, widens and rises into rocky and barren hills, with small valleys timbered with willow and stunted birch. Two degrees north the range divides, one portion running nearly due north and the other taking a north-easterly direction. In the fork formed by these two chains lies the valley of the river Kamchatka. The western chain rarely rises above 3,000 feet, but the eastern chain has many high volcanoes, among them Kluchevsky, which is somewhat higher than Mont Blanc, and not far from the sea. (1) [635]

1. Many ranges of terraces and secondary summits surround the mountain

as with an enormous pedestal, so that its base has a circumference of not less than 200 miles. The fissured summit constantly smokes, and twice or thrice a year throws out cinders. Ashes and dust have sometimes been carried to a distance of 180 miles, and covered the ground many inches deep, preventing the Kamchatdales from sledging. An eruption in 1737 ejected much lava, and this, dissolving the glaciers, poured into the neighbouring valleys a deluge of waters. In 1854 an other stream of fire descended from Mount Kluchevsky. From the crater of the Avasha, immediately behind Petropavlovsk, have been thrown at the same time stones, lava, and water. The following are some of the active volcanoes: Korakovsky, 11,200 feet; Chevelutch, 10,529; Jupanof, 8,478; Avatcha, 8,344; and the Great Tolbach, 7,618; Whilst, of the extinct volcanoes, Uchkin is the highest, with an elevation of 10,977 feet.

Earthquakes are more frequent, perhaps, in Kamchatka than in any other country. The number of shocks felt at Petropavlovsk averages eight annually. (1)

1. Mr. Hill describes one lasting no less than eight minutes. During the whole of this time rumbling and loud noises were heard beneath the ground,

24: Lansdell -634-635 M-2 (1879) 1882 Kamchadal-3
116, 131, 133

and the earth trmbled violently. Some of those who experienced it said they thought at one moment that the earth was sinking beneath them, and the sea about to rush in upon the land, and the next that they were rising upon the crust of the crater of a volcano in terrible eruption beneath the ground."

24: Lansdell-635 M-2 (1879) 1882 Kamchadal
116, 132

" The climate of Kamchatka is much milder than in the eastern parts of the mainland. The frost sets in about the middle of October, but up to December the temperature rarely falls 10 below the freezing point of Farenheit, though in severe winters the thermometer sometimes sinks to 25° below zero. Snow-storms with wind, called poorgas, are prevalent in February and March. They sometimes take up whole masses of snow, and form drifts several feet deep in a few minutes, burying, it may be, travellers, dogs, and sledges, who remain thus till the storm is over. Dogs begin to howl at the approach of a poorga, and try to burrow in the snow if the wind is cold or violent."

24: Lansdell--635-636 M-2 (1879) 1882 Kamchadal
116, 133, 757

"About 50 miles west of Petropavlovsk is a remarkable warm spring, into which when you enter, says Mr. Collins, the sensation is as if the skin would be [636] removed, whilst the stones and mud on the bottom fairly burn the feet, added to which the steam and gas, ascending from this natural caldron, fairly take away the breath. In a short time, however, bathers become red like lobsters, and find the temparature enjoyable. The water is very buoyant. It is used by the natives for all sorts of deseases."

24: Lansdell-636 M-2 (1879) 1882 Kamchadal
116, 132, 137, 241, 286

" The valley watered by the Kamchatka is composed of fine mould, and has abundant natural productions- fir, birch, larch, poplar, willow, cedar, and juniper, and that of larger size than in the same latitude elsewhere in Asia. Raspberries, strawberries, whortleberries, currants, and cranberries abound; and flowers are seen in spring in almost tropical luxuriance. There is much grass in the lower lands, and Mr. Hill records an extraordinary phenomenon in a place he visited respecting the growth and preservation of potatoes. (1) There grows, likewise, a plant in the country called by

1. Admiral Ricord, a former governor of Kamchatka, imported potatoes for seed, and they were planted, but not taken up the following autumn. The next year, being found abundant and good, they were allowed to remain, where , dying and propagating continually, they yielded more than were locally required. Mr. Hill accounts for the phenomenon by the fact that neither damp nor frost could reach the potatoes; for though in winter the snow covers the surface of the frozen ground, yet so great in this vicinity is the internal volcanic heat that the earth is quite dry, and never frozen below a few inches from the surface.

the natives krapeva , from which they make a coarse but very durable cloth. It resembles our stinging -nettle, but is of larger growth and stronger fibre."

24: Lansdell-636-637 M-2 (1879) 1882 Kamchadal-1-2
116, 136, 231, 492

" Among the animals of Kamchatka there is none with which the traveller becomes more familiar than the dog, which is found wild on the hills. The color is usually buff or silver-grey, and in nature and disposition he resembles the mastiff and the wolf, [637] sleeping, like the latter, more by day than by night. He is intelligent as regards his work, but not affectionate, as may be said of the steppe dogs, and has to be ruled by the rod. It is not usually safe to leave these dogs loose, for they kill fowls, deer, smaller dogs, and sometimes even children.(1) As on the Amur, they are usually fed on fish,

1. They love sledging, and upon a journey of four or five days will work from 14 to 16 hours out of the 24 without tasting food, the idea of their masters being that, when travelling, the less food the dogs receive, short of starvation, the better. The travelling sledge weighs about 25 lbs. (a freight sledge is heavier), and a good team will travel from 40 to 60 miles a day. When running, they must be paired with dogs known to each other from puppies; and, should they happen to cross the scent of a deer, so fond are they of its flesh that they sometimes become utterly unmanageable, upset the sledge (or nartee, as it is called), and leave the driver, it may be, to perish in the snow.

particulary the salmon, besides which there are caught in Kamchatka, or off its coasts,

24:Lansdell-636-637 M-2 (1879) 1882 Kamchadal-2
116, 136, 231, 492

the cod, herring, smelt as also whales, walruses, and seals. The country abounds with geese, ducks, and a variety of wild fowl."

24: Lansdell-637-638 M-2 (1879) 1882 Kamchadal
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has scarcely any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

24: Lansdell--638 M-2 (1879) 1882 Kamchadal
116, 177, 793

"I saw, at Khabarofka, and on the steamer, another Kamchatdale, of less presentable appearance, a cleric, wearing his hair in a queue, perhaps for convenience in travel. He was taken, as a boy of 10 years old, to Irkutsk to be educated; afterwards sent to be minister in a church in Russian America, and subsequently became priest of Okhotsk. He is now near Blagovestchensk, and when I saw him was sick. He looked a poor miserable creature, and was pointed out to me by Baron Stackelberg, of whom he had openly asked an alms, as 'ce pauvre diable.' He appeared much pleased with some books I gave him, but was altogether about the poorest specimen of a priest I saw in Russia."

24: Lansdell-638 [2] M-2 (1879) 1882 Kamchadal
116, 133, 161, 226, 361

" The number of the Kamchatdales, strictly so called, is estimated at 3,000. Their capital is Petropavlovsk, the only town on the eastern coast of the peninsula.(1)

1. It is situated on the right shore of the splendid Bay of Avatcha, which may claim with Rio Janeiro and San Francisco to be one of the finest harbours in the world. It is perfectly protected from the winds, and, transplanted to a more favourable position, it might be one of the greatest of markets; but since the fishery of the whale in the surrounding seas has lost its importance, Petropavlovsk has sunk from a place of 1,000 inhabitants to one of 500. Mr. Dobell, who lived in the peninsula five years, says that he found there many dykes and mounds, from the existence of which he argues that the country was once thickly populated."

24: Lansdell-639 M-2 (1879) 1882 Kamchadal
116, 157, 262, 574, 576

" The Kamchatdales are a people of much amiability and honesty. Their houses are always open to the stranger, whom they never weary of waiting upon, and from whom they soon forget an injury. (1)

1. Their hospitality is carried even to excess. They visit one another, for instance, during a month or six weeks, until the generous host, finding his stock exhausted, gives the hint by serving up a dish called 'tolkootha', a hodge-podge, composed of meat, fish, and vegetables; upon which the guests depart the following day. "

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

24: Lansdell-639 [3] M-2 (1879) 1882 Kamchadal
116, 181, 533, 535, 825

" The Kamchatdales have not the heroic character of their neighbours the Koriaks. Their plaintive songs do not celebrate battles, but love, sledge travels, fishing, and hunting. In their dances they mimic admirably the movements of animals, bounding like the deer, running like the fox, and even entering the water to swim like the seal."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

27: Sauer--147 T-2 (1789-93) 1802 Kamchadal
116, 132

"We passed a pleasant and agreeable winter in different excursions to Bolshoiretsk, &c. enjoying all the good things in Kamtshatka, and perfect health. The frost was generally 5° to 8°. The severest cold that we had did not exceed 18°, and lasted only a few hours. Snow was very deep."

27: Sauer--214 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"We passed the winter [CMC: 1790-1791] in excursions of pleasure, and in dancing and card parties, chiefly at Bolshoiretsk, where the luxuries of life are more plentiful than in the harbour of St. Peter and St. Paul. The frost was sometimes very severe, and we had for a few hours 21° below the freezing point of Reaumur. Two or three earthquakes happened about the neighbourhood of Neizshni; but, except a slight shock on the 21st November at noon, none of them reached the harbour of St. Peter and St. Paul.

...

...

By the 1st of May the bay of Avatska was clear of ice, and not before, owing to the feverity of the winter: but the inner harbour of St. Peter and St. Paul remained frozen up."

27: Sauer--285-287 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 787

"On the 11th August [CMC: 1792] in the harbour of St. Peter and St. Paul, I observed a number of swallows flying about, apparently much [286] frightened. They were red breasted, a species never remembered to have been seen here; and the inhabitants immediately predicted some remarkable event; they were, however, only seen during the morning. The next morning, about five o'clock, we were alarmed by a violent shock of an earthquake, preceded by a rumbling noise, little short of thunder. The motion of the earth was undulatory for nearly the space of a minute. I was dressing myself, and was thrown down, which induced me to get out of the house as quickly as possible. The water in the bay was agitated like a boiling cauldron. The shock came from the north-east, and appeared to me to continue upwards of two minutes; but other gentlemen were of opinion that it did not last more than one. A sailor, one of the watchmen on board the ship, was thrown out of his hammock. At Paratounca it was more violent; the earth opened in many places, and water and sand were thrown up to a considerable height; all the buildings in the village were more or less damaged; one balagan was thrown down; some of the ovens (the only brick-work about the buildings) were also shaken in; and all the paintings, &c. in the church, except Captain Clerke's escutcheon, were thrown from their fastenings.

At Neizishni Kamtshatka the inhabitants were extremely terrified; nor could they explain whether the noise or the shock preceded. The situation of the town is on a neck of land formed by the discharge of the Raduga, a considerable river, into the Kamtshatka;

the bed of the former was dry, and the inhabitants ran across it toward the mountains. They, as well as the cattle, were thrown down; and the continuance of the trembling was, according to their account, near an hour; the earth opened in many places, and sunk considerably in some. The volcano Klut-[287]shefskoi emitted a vast column of black smoke; a noise like thunder seemed to issue from the bowels of the earth; the bells of the two churches rang violently; and the howling of the dogs, and screams of the people, surpassed all description, for the latter expected every moment to see the complete destruction of the town. But when the shock was over, the lost water of the river resumed its former channel, and the inhabitants returned to their dwellings. Not a single brick chimney or oven was left standing. The altar of one of the churches was separated from it about a foot, inclining a contrary way; and the greater part of the balagans were thrown down.

It is remarkable, that the inhabitants of the village at the foot of the burning mountain only heard the noise, and did not feel the shock; nor did it cross the mountains to the western shores of the peninsula."

27: Sauer--289-290 T-2 (1789-93) 1802 Kamchadal
116, 133, 137

"I shall commence my description at the southern extremity [CMC: of the Kamchatka Peninsula], which the Russians call the Lopatka, latitude 51°, longitude 156° 40', east from Greenwich; a low point of land, widening and rising gradually into mountains, barren and rocky, only producing here and there the creeping cedar and willow, to the extent of 40 miles. Birch trees then appear in the inconsiderable vallies, which are replete with lakes and runs of water rushing into the sea both east and west. A cluster of mountains occupy the whole space from the Lopatka to latitude 53° 5', where, in the neighbourhood of the village Malka, they divide into two branches, one trending north north-west; the other, which may be called the principal chain, leads north north-east. The place where the mountains separate is the highest land on the peninsula, and forms a barren stony desert of 65 miles in length, in a direction north and south, and from 3 to 15 in width, producing in detached spots brush-wood, willows, and a very few scattered and stunted birch-trees. It is replete with springs and [290] brooks; some of which uniting, and flowing south and south-west, form the Bistrea; while others, at only a few fathoms distance, take an opposite course, and are the sources of the river Kamtshatka. At the end of this desert, the mountains close within a mile or two, and a forest of birch-trees follows to the village Apoushinsk, where the river Kamtshatka is navigable for small boats to its discharge."

27: Sauer--290 T-2 (1789-93) 1802 Kamchadal
116, 133, 134, 135

"From this place [CMC: i.e., north of the village of Apoushinsk, from which point the Kamchatka River is navigable by small craft] the face of the country assumes the appearance of extreme fertility. The valley widens, and the space between the mountains east and west is at Virchni Kamtshatka 40 miles. The soil is deep and rich, composed of black earth, mixed with fine black ashes from the burning mountains, and fine iron sand, which adheres to a magnet, and forges well with bar-iron, but used alone is very brittle."

27: Sauer--290-291 T-2 (1789-93) 1802 Kamchadal
116, 132, 133, 137, 824

"The productions of nature [CMC: in central Kamchatka] are, a small kind of wild black cherry (tsheromka), in great abundance; the wood of which, being particularly hard, is used by the Kamtshadals for their guiding sticks to the sledges: the thickest trees that I have seen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary size, with birch, poplar, asp, and mountain-ash, clothe the mountains to their summit. The underwoods are, currant, dog-rose, hawthorn, alder, and bushes producing berries.

The climate is very different from that of the southern and northern parts of the peninsula, the valley being completely sheltered from the sea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The scenery is beautiful beyond description, [291] the river meandering through the midst of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every species of salmon in the season. This valley is 180 miles in length, frequently opening prospects of the Tolbatshinsk, a lofty double-headed mountain, constantly emitting an immense column of black smoke; while the second volcano, Klutshefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand."

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c.; than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

27: Sauer--292 T-2 (1789-93) 1802 Kamchadal
116, 133, 137, 361, 563

"At Tolbalshinsk [CMC: mountain] the mountains are broken and barren; they encroach upon the valley, and considerably lessen its width. Storms are frequent between this volcano and that of Klutshefskoi, but never reach the neighbourhood of Milhovoi, and the trees are considerably less in size; but the country continues fertile as far as 30 versts north of the village Klutshefskoi, which is also a colony of Siberian peasants for the same purpose as those at Milkovoi, and who act in the same manner [CMC: see category 563, this source, p. 291]. Their proceedings are in some respects justifiable; for the magistracy at Neizshni exact the same payment from them as from the residentiary merchants. The court of justice conflicts of a burgo-master, four members, or rathmen, a secretary, writers, and watchmen; receiving a salary for the time they are in service: and frequently an expensive deputation is sent to Tigil, Bolshoiretsk, Virchni, and such places as are reported to by these pedlars; so that it is a matter of doubt with me, whether the culture of the earth would render any harvest sufficient to answer the payment of their claims. In some years they amount to 18 or 20 rubles, and in others half as much more."

27: Sauer--292 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"As you approach the north [CMC: of the Kamchatka Peninsula], the severity of the climate increases; the soil becomes sandy and stoney; and the vegetable productions are stunted and weak. The isthmus is situated in latitude 59° 20', and the distance from sea to sea is here about 40 miles. The widest part is from Kronotskoi Noss to the river Itsha, about 220 miles."

27: Sauer--293 T-2 (1789-93) 1802 Kamchadal
116, 161, 361

"I have already mentioned the situation of the town Neizshnoi Kamtshatka, which contains 80 isba's, or houses, with two churches; and its number of inhabitants, including children, 548 souls; latitude 56° 33'."

27: Sauer--293 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The western coast of Kamtshatka is uniformly low and sandy, to the distance of about 25 to 30 miles inland, where the mountains commence. It produces only willow, alder, and mountain-ash, with some scattered patches of stunted birch-trees. The runs of water into the sea from the mountains, do not deserve the name of rivers (except the Bolshoia Reka), though they are all well stocked with fish from the sea in season, as trout and different species of salmon. They are generally at the distance of 15 to 20 miles from each other. The Itsha and Tigil are the most considerable; and neither of these have a course, with all the windings, of more than 100 miles.

The sea is shallow to a considerable distance; and the commanders of the transport vessels, who never lose sight of the exposed coast if they can help it, judge of their distance from land, in foggy weather, by the soundings, allowing a fathom for a mile; nor is there at the entrance into any of the rivers more than six feet at low water, with a considerable surf breaking on the sandy beach."

27: Sauer--293-294 T-2 (1789-93) 1802 Kamchadal
116, 161, 361 Russia
636.71

"The villages on this coast [CMC: i.e., the western coast of Kamchatka] are, Tigilsk, Itshinsk, and Bolshoiretsk (situated on the Tigil, Itsha, and Bolshoia rivers). Of these the former is the most considerable, containing 45 wooden houses, and one church. The Russian charts place it in latitude 57° 55'. This, which they call a fortified town, is surrounded by wooden palisades, and was built in 1752. The num-[294]ber of inhabitants are 338, including women and children. Itshinsk also contains a church, and about 10 houses, with 50 inhabitants. Bolshoiretsk contains 37 houses, and the total number of inhabitants are 235. Beside these, there are eight inconsiderable villages, containing each three or four houses, on the west coast."

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-1-3
116, 133

"The eastern coast is composed of mountains, rocks, rugged cliffs, and bold promontories, replete with inlets, and the appearance of such. Their entrance, however, is blocked up by reefs of rocks, the openings of which are only to be entered by the boats of the natives. Immense masses of stone are scattered out at sea to the distance of one two, and three miles; some of them being only discernible by the breakers, while others tower to a considerable height. The depth of the sea varies much, and suddenly, from 30 to 90 fathoms, and more. Earthquakes are frequent, and sometimes very violent.

The only harbour for ships on the whole peninsula is the Bay of Avatsha, which is probably the safest and most extensive in the world. I shall exert my utmost ability to describe this place; but fear that I shall scarcely be able to do it justice.

I will suppose myself approaching the coast from the south-east. When first seen, it appears strait and uniform, without bays or inlets; the land rising into moderate mountains, backed by such as are more lofty. Three of them, apparently united, [295] are very conspicuous to the north of the Bay, the farthest, or the most western is the highest and is conical; the next is a volcano, distinguishable by a column of smoke issuing from its summit, which is broken; the third presents several flat tops, lowering, and trending east, from which a narrow and lofty broken and irregular point of land extends about 15 leagues, terminating in a promontory called Sheeponskoi Noss. South of the bay are two remarkably lofty mountains; that nearest the entrance (Vilnitsheskoi Sopka) is formed like a sugar loaf; the other, Apalskoi, is far inland, not so lofty, and is flat on the top.

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-2
116, 133

On getting well in with the land, it is high, craggy, and broken, presenting the appearance of inlets. When about the latitude of 52° 45', and longitude 159° 15', the entrance into the Bay of Avatsha discovers itself, bearing north-west by west; south of which, at the distance of about four miles, is a small round island, composed of high pointed rocks, called Staritshkovoi Ostrov. The north cape is a bluff head, with a light-house on the top of it, resembling a centinel's box. From this cape eastward, to the distance of three miles, breakers are discernible over hidden rocks, which extend to the south about half a mile. Within the channel, are three detached needle rocks near the north side: on the opposite shore a single one remarkably bulky, the top of which is nearly flat. Soundings lessen from 40 to 12 fathom, over a stoney bottom; and 10 fathom in the channel, sand and mud.

The entrance is in latitude 52° 51', longitude 158° 48', whence Sheeponskoi Noss bears east north-east, distant about 17 leagues. It forms a channel in a direction north north-west four miles deep; the breadth is three miles in the widest, and two in the narrowest part; both shores rocky; the summits covered with birch trees, mountain-ash, and hawthorn. Having passed this [296] channel, you enter a most magnificent basin about 25 miles in circumference, completely land-locked, and every where (except the north-west extremity) high, and covered with trees. As we advance in the basin, commodious harbours open: to the east, Rakivinoi, about three miles deep, and three quarters of a

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-3
116, 133

mile wide. The south cape is a lofty perpendicular mass of stone. Shoal water over rocks extend from the shore into the bay, about 50 fathoms from south to north, which makes the entrance difficult. The north cape is a high rocky shore, with some rocks that are detached; but these are visible, and not of any extent; the depth within is from 13 to 3 fathoms."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]: its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636.71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

27: Sauer--297 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"The harbour of Tareinsk opens to the west: the entrance is about one mile in length, when it suddenly turns to the south-east, extending twelve miles in length, and three in width: the depth is from six to eight fathoms, mud and sand. A narrow neck of high land at the bottom, like an artificial partition, separates it from the sea. This harbour, although extremely convenient in its construction, is not so in its situation; as an easterly wind is absolutely necessary to bring outward bound vessels into the bay of Avatsha where it is quite contrary; besides, it is exposed to the north and north-west winds, which blow over the plains of Avatsha right into it, and keep it blocked up by ice till late in the season."

27: Sauer--298 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137, 161

"Near the mouth of this harbour [CMC: of Tareinsk in Avacha Bay], on its north-west borders, is a valley forming a plain of about one mile and a half square, well wooded with good sized birch trees: a situation which Major Behm thought the most eligible of any hereabouts for a town. North and south are lofty mountains of easy ascent, covered with trees to their summit. The valley is bounded to the west by a fresh water lake of about 15 miles in circumference, well stocked with fish all the year through; while its borders abound in different kinds of berries, sarana, tsheromtsha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief source of the river generally known by the name of the Paratounca, of which I shall shortly give an account, as also of the other rivers. The remains of numerous villages in the vicinity of this lake strongly indicate the former popolousness of these parts; but they are at present overrun with bears, wolves, and hares."

27: Sauer--298 [2] T-2 (1789-93) 1802 Kamchadal
116, 136, 226

"The fish of the bay of Avatsha are, cod all the year through; thornbacks, flounders, and halibuts, as soon as the ice begins to break; whitings are caught all the winter by the boys and girls, who make a hole in the ice, lie flat upon it, and look into the water, holding in it a horse-hair noose on the end of a stick, which they get round the fish, and by these means haul them up very fast. Herrings and smelts are the first passage fish that appear (the former in immense shoals towards the latter end of April), and they remain till the beginning of June: their numbers, indeed, are incredible."

27: Sauer--299-300 T-2 (1789-93) 1802 RY3 Kamchadal-1-2
116, 136

"On the 7th June, in the inner harbour of St. Peter and St. Paul, I observed, at the flood tide, a considerable number of herrings swimming round in circles of about a fathom in diameter. Seeing them continue in this particular manner, I approached very near them, and remarked, in each of the circles, one fish very close to the ground, upon the weeds, and apparently without motion. I could not account for this peculiarity in their swimming, but thought that the weeds about the herring in the middle became of a very lively yellow colour. When the tide ebbed, and left these places dry, all the weeds, stones, sticks, &c. were covered with spawn about half an inch thick, which the dogs, gulls, crows, and magpies, were devouring with great avidity. These shoals of herrings, which are pursued by seals, cod, &c. come in spring and in the autumn; there is, however, a considerable difference in their size; and I believe the spring glut are the largest fish. The natives and other inhabitants ensnare a great quantity in autumn for their dogs.

The oil extracted from herrings is very pellucid and sweet; it preserves birds' eggs all the year quite fresh and good, as does also the oil of seals, whales, &c.

Herrings no sooner disappear, than immense shoals of salmon push into the bay and up the rivers; the first is the smaller sort, called the gorbushka (or hunch-back), from a remarkable protu-[300]berance which distinguishes this species. They are in great perfection about four or five weeks; and are no sooner in a state of decay, than another and larger species follows. These are succeeded by other sorts, all of the salmon kind,

27: Sauer--299-300 T-2 (1789-93) 1802 Kamchadal- -2
116, 136

until the end of September. I could not distinguish some sorts till they were boiled, when the paleness or redness of the flesh indicated a difference. The names of the different species are siomga, tshavissha (both very large), gorbushka, kaiko, krasnaia (red), and belaia (white). They push up the rivers, and get into the lakes, where the two latter continue all the winter, but get extremely deformed, crooked-backed, thin, and covered with red blotches; the upper jaw extends beyond the under jaw, and bends over it; the mouth is full of very large teeth, and the flesh is flabby. Here are also great varieties of crabs, sea eggs, prawns, muscles, cockles, and the small pearl oyster."

27: Sauer--300-301 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The plains of Avatsha, which bound the bay to the north-west, extend 18 miles from east to west, and 35 miles from north to south, producing at their northern extremity only a few patches of birch, poplar, and alders; all the rest are marshy grounds, overgrown with rushes and coarse high grass, with some spots of oziers and alders; the resort of myriads of water fowl, swans, geese, an amazing variety of the duck kind, and I believe every species of snipe. The river Avatsha runs in several branches through this plain. Towards its northern extremity are an immense number of cold springs, that form several basins of water, with small runs, uniting in a rivulet, which has a course towards the south of two miles, and empties inself into the river generally known by the name of the Paratounca, but which is called by the natives Ilmitsh; and the original Paratounca is the run from the springs above mentioned, opposite to the discharge of which the village of that name is situated. These springs do not [301] freeze in winter, during which season they are frequented by swans, geese, and several species of duck, particularly the safka, or duck with a melodious note, which has induced me to stile it musical. Here they find an abundance of food, and the pulpy root of an aquatic plant which, in its appearance, exactly resembles the olive, but is like the chesnut in flavour: I used it as a vegetable, and thought it better than any production of the gardens; the natives call it the sarana of the geese."

27: Sauer--302 T-2 (1789-93) 1802 Kamchadal
116, 133, 224, 484

"The Ilmitsh, commonly called the Paratounca, has its rise from near the Viluitshiskoi Sopka (called in Cook's last voyage the Paratounca); and from a lake near the Tareinskoi harbour, it makes a circuit of 85 versts, and discharges itself into the bay of Avatsha, only three miles in a direct line from its source: it is navigable for boats all the way; but I was fourteen hours in traversing the whole of this river, from the lake, in a canoe. The villagers of Paratounca go on the chase of deer, argali, bears, &c. about the source of this river, by passing down the stream into Tareinski harbour, and hauling their canoes over the plain already mentioned into the lake. An immense number of rivulets from the mountains flow to the east into the ocean, but none of them are either remarkable, or have their banks inhabited."

27: Sauer--302 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 777, 825

"Here are no lakes of any extent: the names of the principal ones are, Osernoi, about 40 miles from Cape Lopatka; Kronotskoi, 20 miles south-east of Tolbatshinski volcano; and another of less extent, situated about 40 miles north of Neizshni Kamtshatka, called Nerpitshi: the natives say that they are replete with fish; and tradition relates, that the fish of these lakes had two heads, or that they possessed legs; and, being sacred to some deity or demon, those who presumed to ensnare them were punished with misfortunes: some of the natives, however, seem to doubt the truth of this, while others still firmly believe it."

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

27: Sauer--304 T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"Toward the source of the Bystria, near the village Malka, are hot springs, a little way up the ascent of one of the mountains, which boil out of the earth in two or three places about a foot wide. Similar springs are seen near the village Natsheke, but more extensive, and forming in their run several convenient bathing-places. These have a sulphureous smell; and the stones taken from the bottom of the openings, where the springs appear, are covered with a shining thin coat, which resembles silver at first, but gets dull and of a dark colour after it has been sometime exposed to the air: the surrounding earth, to the distance of 20 fathoms in every direction, is warm, replete with empty shells like those of snails, and a transparent glutinous substance; as also with spots of loam, whereon any thing heavy being thrown sinks immediately. South of these springs, about the distance of 30 versts, at the source of the river Natsheke, is a sandy level spot, with several hot springs, the water of which is said to be brackish."

27: Sauer--304-305 T-2 (1789-93) 1802 Kamchadal
116, 133, 757

"At the distance of 12 versts from the village of Paratounca, in a direction north-west, is the discharge of a deep rivulet of warm water, called Klutshevoia, navigable for canoes three versts up-[305]wards. It springs from several hot water lakes in an extensive plain; one of which lakes is about 100 fathoms long, and 7 fathoms wide; very convenient for bathing near the shore, but the middle very deep, and extremely hot. About 20 fathoms from this is another, about 5 fathoms by 7, but excessively hot: a body of boiling water issues through a square hole in a stone at the eastern extremity; and it has a run into a cold water spring, so narrow, that you may stand with one foot in each. Ulcers, old and fresh wounds, are reputed to heal from bathing in this water. I used it for tea, but the flavour was not very agreeable, being something like that of alum. The hot springs of Shumatshik are situated 90 versts north of the bay of Avatsha, and flow into Kronotskoi Bay. There are several others, but of no note."

27: Sauer--305-306 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133

"The following are the principal volcanoes:

Opalsk: I have described this mountain as seen from the sea. Its situation is near the hot springs; but its emission of columns of smoke is of very recent date, and they are not constant; nor has it ever been observed to blaze. --Viluitsh, or Viluitshiskoi Sopka: this seems now completely extinguished:--Avatsha, 25 miles north of the bay, constantly sends forth a body of smoke from its summit; as does also Tylbatsh, and Klutshefskoi, or Kamtshatskoi Sopka, both situated near the river. Tylbatsh (frequently written Tolbalshinsk) is one of the mountains that constitute the eastern chain; but projects considerably towards the river. It is more lofty than the rest, and has a pointed top. A little way down it, a sharp ridge stretches away to the north; from this ridge, and the side of the mountain where it joins, the smoke issues. I have observed, in a clear night, a reflection over it, resembling the Aurora Borealis. Klutshefskoi volcano may be reckoned among [306] the highest peaks, I believe, in the world. It is situated 175 miles west of Bering's island, from which, however, it is distinctly seen in clear weather at the time of the sun's setting: at least, I am assured of this by several Kamtshadals who have been on the island. This volcano is frequently subject to eruptions: in 1789, on the 20th November, a great noise preceded an earthquake; flames burst forth, with discharges of small stones and ashes: the trembling of the earth and the noise continued, more or less, till the 23rd, when it abated considerably; but on the 15th February 1790, it again resumed its former violence until the 21st: all

27: Sauer--305-306 T-2 (1789-93) 1802 • Kamchadal-2
116, 133

this time earthquakes were felt two or three times in the course of every 24 hours.--Shevelutsh is 80 versts north of Klutshefskoi: this burnt formerly; but now it seldom happens that smoke issues from it: this volcano is the source of two rivulets, the Iltshutsh and Bakus, both of which flow into the Kamtshatka."

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-1-2
116, 161, 563, 651 Russia
636.65

"The number of inhabitants may be stated as follows, men, women and children:

At the town (Neizshnoi) - -	548
Ostrog Tigil - -	338
Virchnoi - -	226
Bolshoiretsk - -	235
And at the harbour of St. Peter and St. Paul - -	85
Colonists - - -	255
Russians - - -	1687
Kamtshadals - - -	1053
Total - - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the list of those who are tributary, according to the revision [307] made during the government of Mr. Reinikin, who succeeded Major Behm. The revisor (in 1784), by some unaccountable mistake, has frequently noted the name of one and the same person as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonstrances, but in vain: this imposition, however, is the least

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-2
116, 161, 563, 651 Russia
636.65

of their sufferings. They are compelled to pass the greater part of their time in procuring necessaries for their visitors. The governor makes his annual circuit round the peninsula, and receives a present from every individual; the captain of the district goes his rounds twice; different deputations from the courts of justice, soldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horses are quartered at each village, and the inhabitants must provide a stock of hay for them. Thus the Kamtshadal scarcely finds time to collect a supply of food in the fishing season for his own family."

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
636.65

"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

27: Sauer--308 T-2 (1789-93) 1802 Kamchadal
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

27: Sauer--308-309 T-2 (1789-93) 1802 Kamchadal
116, 157, 273

"They are an honest and hospitable race of men, extremely fond of music and of brandy. One of them, who constantly accompanied me in my aquatic excursions, and expended every farthing of his money in brandy, I one day saw coming to my habitation; and, to tempt him, I hid myself in an adjoining [309] room, leaving a glass of brandy upon the table, and a bottle half full close to it, with some sea-biscuit. He came in, saw nobody, and called me, but obtained no answer. Upon which he advanced to the table, and smelt to the glass: 'It is brandy,' said he, 'but I will not drink; and the bottle 'half full; well, I won't taste you; but I'll go and seek master, and scold him for leaving 'you in this manner. I'll just smell again, and go.'--I stepped out of window into the garden, and went to meet him: when he accosted me in the following manner: 'I have 'been into your room and saw a glass full of brandy; perhaps you won't believe me, but 'indeed I did not taste it.'--'I dare say you did.'--'No, by G--, I did not: I knew you "would not believe me; but a Kamtshadal will never take anything without permission.' --'Well, I must believe you; will you come and drink it?'--'Yes, that I will; but I 'wanted to scold you for leaving it so.' "

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

27: Sauer--310 T-2 (1789-93) 1802 Kamchadal
116, 177, 241, 563 Russia
636.24

"About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Petersburg. Major Reinikin succeeded him in the command, and wished to introduce among the natives the culture of the earth, but could not succeed; he brought potatoe seeds with him; first grew them in his own garden; and from thence they were abundantly distributed all over the peninsula, with every species of garden vegetables, which are cultivated with great success by the Russian inhabitants."

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-1-3
116, 563, 635, 651 Russia
636.63

"In the year 1783 a mandate from her Imperial Majesty proclaimed Neizshni Kamtshatka a city; ordained it the seat of government of the country under the chancery of Ochotsk offered privileges to such merchants as chose to become burghers; and instituted courts of justice, establishments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitshik (mayor); and his establishment consists of a secretary and writers; a Kaznatshestva (exchequer) for the receipt of the revenue, and payment of officers; a Zemskoi Sud (court of the interior), of which the Ispravnik, or captain of the district, is president, and in this court one of the natives is a member to represent the whole body; with a magistracy to regulate mercantile concerns, as already mentioned. [311]

The salaries allowed by government to the different officers are as follow:

The Gorodnitshik	- -	600 rubles.
His Secretary	- -	300
The Kaznatshae	- -	400
Ispravnik	- -	400

other officers less in proportion; some of the writers having only 24 rubles per annum.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-2
116, 563, 635, 651 Russia
636.63

Prices of Articles 1793	Kazan.	Kamtshatka.
Linen for shirts per arsheen*	18 cop.*	120 cop.

*A pood is 40 lb. Russ, or 36 lb. English. 100 copeaks make a ruble; a copeak may be reckoned little more than a farthing sterling. 9 arsheens make 7 yards.

Boots per pair - -	3 rub.	12 to 18 rub.
Thread stockings do. - -	125 cop.	4 to 5 rub.
Soap per lb. - -	6 cop.	60 to 100 cop.
Candles do. - -	8 cop.	80 to 100 cop.
Tea do. - -	2 rub.	12 rub.
Sugar - -	50 cop.	3 rub.
Leaf tobacco per lib. - -	5 cop.	3 rub.
Rye flour, per pood* - -	50	500 cop.
Wheat do. - -	60	800 cop.
Rice per lib. - -	10	100 cop.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-3
116, 563, 635, 651 Russia
636.63

From this statement of prices, the impossibility of an officer living upon his salary will plainly appear; he is therefore compelled to find out some method of increasing his income, at the expence of the poor natives.

One of the captains of the district, who came here with his wife and family, finding himself extremely distressed, appropriated [312] the tribute of one year to his own use, and wrote a letter to the Empress; stating, that the severity of the climate, the prices of every article of life, and the wants of his family, had compelled him to make use of the tribute, consisting of such a number of sables and fox skins for their backs and bellies, which he rather chose to do than rob the poor natives (the only alternative). He requested her pardon, and an appointment where he could live upon his salary; and the industry of his family (of no benefit in Kamtshatka) might help to repay the amount of the articles that he had appropriated to his own use. The Empress ordered the governor to give him such an appointment, and pardoned him on account of the good reasons that he assigned; but this pardon was not to be regarded as a precedent; for such mercy was not to be extended to any future person who should dare to act in the same manner.

The magistracy receives its income from the burghers and meshanin. The latter are privileged pedlers (and the colonists are of the number); the former are divided into three classes, according to the extent of the capital that they give in, upon which they pay one per cent."

27: Sauer--312 T-2 (1789-93) 1802 Kamchadal
116, 273

"French brandy is now regarded as an article of trade; and a spurious sort is carried about the villages of the natives, who are very fond of it, and pay for it at the rate of one ruble per glass."

27: Sauer--312-313 T-2 (1789-93) 1802 Kamchadal
116, 221, 222, 251

"The Kamtshadals and residentiary Russians employ themselves during the summer in catching fish; drying some, and salting others for a winter supply for themselves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the [313] sweet plant, and kiprey: the former is purchased by government for the distillery of brandy, at three and four roubles the pood when prepared and dried. In the spring they collect birds' eggs about the marshes, and particularly among the rocks at the mouth of the bay of Avatsha: these they preserve all the year with oil."

28: Sarytschew--60 T-1 (1789-90) 1806 Kamchadal
116, 136, 224

"At the entrance of the bay of Awatska, we passed a light-house, erected on a lofty rocky prominence, on the left of which was an insular mountain of stone, called Staritschkow, after the name of a bird that frequents it in great abundance. The staritschkow is a bird about the size of a pigeon, with a bluish bill, and small feathers, of a bristly kind; its head is of a purple colour, having a circle of white feathers in the middle, which are thinner and longer than the rest. Its neck is black above, with white spots underneath. Its body is white, the short large feathers of its wings blackish, and the rest blue; its sides and tail black; its feet red, and trebly indigited with a web between each, and its claws black. On the little islands of Kamtschatka they are found in vast numbers, and are caught by the Kamtschadales with great facility. Besides this bird, there are also sea-parrots, mews, and urilas, the latter of which paid us a visit of curiosity as before, and then disappeared."

28: Sarytschew--60-61 T-1 (1789-90) 1806 Kamchadal-1-2
116, 133

"The entrance of the bay [CMC: Avacha Bay] by the light-house, has 13 fathoms water, and a sandy bottom. The banks on both sides are peaked and stony, having occasionally windings, in and out. Not far beyond the light-house, stand three lofty isolated rocks in the form of pillars, close by each other; on which account they are denominated the Three Ribbons. Very near these pillars is a little creek called the Saline, from the salt-works which exist on its banks. On one side of the creek, lies a little stony island, called the Traitor's Island, from its having been the place of concealment for the ring-leaders of the Kamtschadale insurrection against the Russians. On the other side is a lofty rock, called the Grandmother's Rock.

The entrance into the bay extends two leagues beyond these, and terminates with the commencement of the bay itself, which is 26 leagues in extent, and loses itself in three creeks, running parallel with each other: one of which is called Tarjinskoi, the second Rakowoi, and the third forms the harbour of Petropaulowsk, which was the object of our destination. It lies more to the north of the entrance, in the middle of which is a sand-bank, where the depth of the water is scarcely 1 1/2 fathom. The creek itself is from six to fifteen fathoms deep, and affords a good anchorage every where in its muddy bottom. The shore and surrounding country are mountainous, except towards the north-west, where there are some plains and low-lands. From this side also, flow the rivers Awatska and Paratunka, into the creek.

Towards evening we came to anchor near the harbour of Petropaulowsk, which is above

28: Sarytschew--60-61 T-1 (1789-90) 1806 Kamchadal-2
116, 133

the verst in circumference. On the [61] west side, it is sheltered by a mountainous narrow peninsula, and on the south side, by a small gut of land, consisting of pebbles, and called Koschka. Between that peninsula, and Koschka, one must run into the harbour. The breadth of this straight is 40, and the depth, from seven to nine fathoms. The bottom is muddy."

28: Sarytschew--61 T-1 (1789-90) 1806 Kamchadal
116, 133, 161, 361

"On the Koschka [CMC: a jutty of land at the entrance to Petropavlovsk harbor; see category 133, this source, pages 60-61] there are eight dwelling-houses, interspersed with several buloganen; or log-houses, and on the north shore of the haven are four, together with a wooden building for an hospital, and the store-houses built during the expedition of Commodore Behring, which are still in good condition. The number of the inhabitants is limited to eleven Kamtschadales, one ensign from the army, and 23 Kosaks. The country around the haven is mountainous, but the north and east sides have sufficient level ground for 300 houses."

28: Sarytschew--62 T-1 (1789-90) 1806 Kamchadal
116, 135, 136

"By some beds of rock in this peninsula [CMC: at the entrance to Petropavlovsk harbor], we discovered green jasper marl, on which were the representations of shrubs or trees; we also found, in the crevices of the rocks, some layers of amaranth, not very large, and remarkably thin.

For some time after our arrival, there was no fresh fish to be had. In the beginning of November, we began to catch wachnas in abundance, and occasionally herrings. The wachna, (Gadus æglesinus), is a sort of stock-fish, about half a yard in length, with a roundish body, and three dorsal fins. When taken out of the water, it is perfectly of a copper colour, but soon turns quite pale. Its flesh is white, but soft, and not pleasant to the taste. The roe is, however, of a fine texture, and has the best flavour. It is an inhabitant of the European Ocean, but most frequently found in Kamtschatka."

28: Sarytschew--63-64 T-1 (1789-90) 1806 Kamchadal-1-2
116, 231, 492, 493

"On the approach of winter, the inhabitants are busied with putting their sledges in order, and tying up their dogs, to fit them for drawing, as they are in fine weather allowed to run loose. Sledges and dogs are in general use here, both for travelling and conveyance. . . .

The sledges here differ very considerably from those of Ochotsk, being shorter, smaller, lighter, and much higher. They will scarcely hold two, and are very unsteady on account of their monstrous height. In descending any hill, the utmost care and dexterity is requisite, to keep the feet and the oschtol in the proper direction; for the smallest oversight of this kind may cost a person his life, as has been the case with even experienced drivers, who have been dashed to pieces against the trees lying in the way.

The management of the dogs is no less difficult and dangerous here than at Ochotsk; for they are equally apt to become ungovernable on the scent of any animal. In order to stop them, they drive the oschtol between the front sledge of the conveyance as far into the snow as possible, and always keep the two fore dogs in a tight rein, that none may be able to run away. When the declivity of any mountain is unusually steep and dangerous, they bind birch-twigs round the bottom of the sledge, to impede its course. The cry of ko ko ko stops the dogs; aach aach drives them on; chna chna chna, turns them to the right; and uga uga uga, to the left. Hunters to not make use of these words, for fear of frightening their game, but strike gently with the oschtol on the right side of the sledge, when they should turn to the right, and bend them down to the snow to the left, when they

should go to the left. Besides the danger in this mode of travelling, it is attended with many inconveniences. You must never let your dogs go loose. If ever you are overturned, you must rather be dragged along in the snow than leave your hold, for it is a great disgrace to lose your [64] dogs, and be obliged to wade through the snow on foot; not to mention that the dogs very often entangle themselves in their harness, in which case, the driver must take off his gloves in the cold to put them to rights, and is often in danger of being soiled with their dung. The worst trick you can play a driver, is to cast a piece of jukol among his dogs, who fight for it until they are thrown into the utmost confusion. If he be in company with others, he is thus prevented from keeping up with them, and exposed to all the inconveniencies of going behind; the principal of which is, that the dung of the other dogs is continually freezing on his sledge, and requires him every moment to clear it away with his knife. When you get to a public-house, you are not free from your dogs. The instant they are unharnessed, they must be tied to a post. Nor can they be immediately fed, for they must wait until the sweat is dried off. A whole or half a jukol is then given them, but the master must stand by to see that every dog gets his part, and also to drive away the crows, which are not very shy in this country. They will collect in great quantities round the dogs if not thus guarded, and snap up all their allowance."

28: Sarytschew--65-66 T-1 (1789-90) 1806 Kamchadal
116, 361, 563

"The fortress of Bolcherezsk, situated on the banks of the Bolschaja, has a church and thirty habitations. Its inhabitants consist principally of Kosaks, with a few merchants and citizens. Before the advancement of the fortress Nishne-Kamtschatzsk to the rank of a town, the first magistrate of Kamtschatka made this his place of residence; but now a serjeant is commander of the fortress. The Kosaks here are much more opulent than those of Petropaulowsk, almost all of them having their cattle and a good domestic economy. Their gardens are stocked with excellent turnips and potatoes. For the introduction of the latter vegetable they are indebted to counsellor Reineke, the former commander of Kamtschatka.

All the inhabitants here are usually dressed like the Kamt-[66]schadales, in narkas and kamlegas. The former are the skins of reindeer, cut into shirts; and the latter are skins of any kind, stripped of their hair, and made quite pliant. On holidays, the women wear a sort of silk gown of an old Russian shape, which was fashionable 60 years ago. They have also a speckled silk handkerchief about their heads.

In the first days of the new year, the inhabitants assembled every evening for the purpose of dancing. The women understood Russian dances very well, and what was still more surprising, could dance in the Polish fashion, and very passably even à la Grecque. The music consisted of three fiddles, played by Kosaks."

28: Sarytschew--66 T-1 (1789-90) 1806 Kamchadal
116, 535, 825

"I did not see the Kamtschadale dance here [CMC: at Bolsheretsk], but among the Kosaks of Petropaulowsk, who give it the preference, it is so indecent, that every modest woman would blush to be a spectator, much more a partner in it. A woman makes the commencement by stepping forward into the middle of the Isba, and holding a cloth spread out before her in a transverse direction. She shifts her feet slowly, making a variety of motions with her hands, head, and body. Her head sinks alternately on one shoulder or the other, on her back or on her breast. She then at length advances to a man, and renews this gesticulation close before him, which implies as much as soliciting his hand to the dance. He accordingly takes hold of the cloth in the same manner, and rising from his seat, they both commence the distortion of all their limbs together. The woman turns every now and then away from the man, but returns to him instantly again, sinking gradually upon her knees, and then bending herself backward with a similar gesticulation; the man also in the mean time falling down and reclining himselv over her, the dance is concluded with the most obscene gestures. While it lasts, both dancers and spectators all sing to one song, consisting of the words an-kelle, an-kaget, incessantly repeated: but they have a variety of such monotonous ditties, adapted to the same species of dancing. In some of their dances, they imitate birds and beasts; the man for example representing the male, and the woman the female-bear; and sometimes there is a company of these imitators, who amuse themselves together, either in running like partridges, gabbling like geese, or in aping some other animal."

28: Sarytschew--66-67 T-1 (1789-90) 1806 Kamchadal
116, 222, 262, 609, 825

"On our journey we experienced the most friendly treatment from the Kamtschadales, who not only entertained us with the utmost cordiality, but made us liberal presents of partridges, fresh fish, frozen keta, jukol, berries, and roots, [67] which are collected in great quantities from the mouse-holes, and form one of their principal aliments.

In autumn, they go into the fields in search of these roots, and as soon as they find hollow ground, by stamping, they dig down, and lay open the store-rooms of these animals. They do not, however, empty them entirely, but leave the mice a third at least of their provision, probably with a view of not driving away such useful creatures. They terrify each other, indeed, with the saying, that the mouse which is deprived of all its sustenance, will hang itself in despair on the next tree; a tale which may perhaps have originated in the circumstance of a mouse having been entangled by accident in the branches of a tree, and having hung there till it died."

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-1-2
116, 177, 276, 789

"Notwithstanding the Kamtschadales have renounced most of their former superstitions, they still retain a firm belief in the supernatural powers of the schamans. A Kosak once profited by this credulity to regain his stolen property in a very ingenious manner. While on a journey with several Kamtschadales, he had some of his tobacco stolen from him, and, after questioning every individual separately, he was unable to discover who was the thief. He accordingly took some sticks, and making them of equal lengths, gave each of them one, with the assurance, that the stick of the thief would infallibly grow longer by the [68] power of schamanary. This unpleasant intelligence had such an effect on the imagination of the thief, that he actually conceited that his stick did increase in length, and thought to relieve himself from this dilemma by breaking a piece off. The next morning, every Kamtschadale carrying back his stick, the thief was instantly discovered. He was now obliged to confess the theft, and make restoration. His apology was, that all his own tobacco being gone, he had no money to buy more, and could not dispense with this necessary. Tobacco was remarkably dear at that time in Kamtschatka, a single pound costing a hundred rubles; and yet the inhabitants of this place sacrificed every thing to the indulgence of their passion for this intoxicating herb. Its ordinary price on a fresh supply is only two rubles and a half.

Tobacco is one of the most lucrative branches of trade in these parts, and always finds a ready sale; for there is not a tribe or nation having any intercourse with the Russians, which does not smoke, chew, and take snuff. The Burats, Jakuts, Koraks,

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-2
116, 177, 276, 789

Jakugirens, and Tschukschens, like the strong Tscherkapian tobacco, and are not fond of that which grows in the country of Irkutsk. They smoke it with a mixture of half saw-dust; but the Kamtschadales and Aleutians only chew tobacco and take snuff."

28: Sarytschew--68-69 T-1 (1789-90) 1806 Kamchadal
116, 133

"On the 25th of February [CMC: 1790, while at Petropavlovsk], we observed an evident agitation of the earth, which is very frequent and strong, owing to its [69] proximity with the volcanic mountain of Awatska; but this was the first of the kind during our stay here. This mountain was likewise perfectly quiet, and emitted nothing but smoke; while the Klutschewish summit, on the other hand, sent forth, in January, flames, stones, lava, and a quantity of black sand, with which the whole circumjacent country was covered."

28: Sarytschew--69 T-1 (1789-90) 1806 Kamchadal
116, 133

"I sailed about for the purpose of surveying the bay of Awatska, and the two side bays. Rakowoi is three leagues long, and half a league broad; its depth is from 6 to 13 fathoms, and its bottom is muddy. The other, Targinskoi, situated on the north-west side of the Awatska bay, is five miles in length, and half a mile in breadth. Its north-east bank consists of a narrow mountainous promontory, which separates it from the Awatska bay. It has 13 fathom of water in the middle, which diminishes as you proceed downwards. Its bottom is likewise muddy.

The two rivers, Awatska and Paratunka, flow into the northern part of Awatskish bay, after running down the mountains through several low lands. From the mouth of these rivers upwards, there is a dry place half a mile broad; but elsewhere, the whole bay is tolerably deep, and would admit of large vessels to lie at anchor in 14 fathoms water. The bottom in the deepest places is muddy, but in the shallower parts is sandy."

28: Sarytschew--70 T-1 (1789-90) 1806 Kamchadal
116, 177, 436 Russia
636.43

"Copper money is scarcely known in Kamtschatka, silver coin only being in use; but small notes or assignations are beginning to get introduced."

29:Cochrane T-2 (1821-22)1824 Kamchadal

NARRATIVE

OF

A PEDESTRIAN JOURNEY

THROUGH

RUSSIA AND SIBERIAN TARTARY,

FROM THE

FRONTIERS OF CHINA

TO THE

FROZEN SEA AND KAMTCHATKA;

PERFORMED DURING THE YEARS

1820, 1821, 1822, AND 1823,

BY

CAPT. JOHN DUNDAS COCHRANE, R.N.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1824.

29: Cochrane T-2 (1821-22) 1824 Kamchadal

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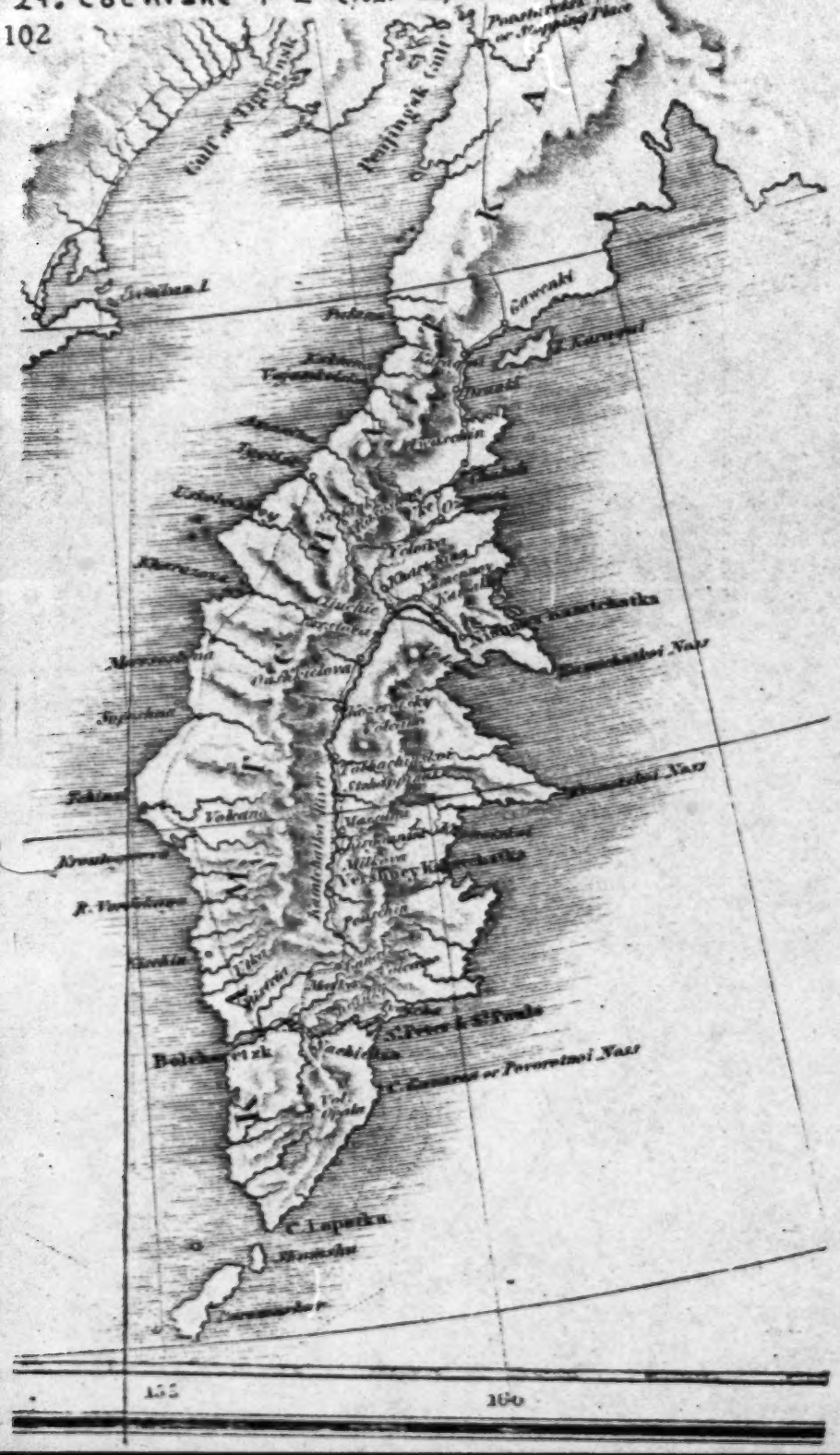

29:Cochrane T-2 (1821-22) 1824 Kamchadal RY3

000 ter which, on a beautiful frosty moon-light morning,
I resumed the journey over a picturesque and mountainous country, well wooded and watered. Late at night we reached a small place called Apachinsk, forty-five miles. Ere we arrived we had to cross the river called Bolshaya in a canoe, the river not being frozen, a circumstance at this time of the year very
361 rarely known. Thirty-miles farther we reached the
161 ancient capital of Kamtchatka, Bolcheretzk, now a small village containing fourteen dwellings, one hundred and sixteen inhabitants, and about thirty
000 balagans, i. e. sheds for drying fish. The path to it was over a flat level along the river. I was myself the driver towards the abode of my now father-in-law, whose homely manners, numerous, healthy, smiling children, and hearty breakfast, made ample amends for the fatigues of the last two days.

Bolcheretzk stands on the river of its own name, about fifteen miles from the sea of Okotsk, and has little to boast of at present but the affectionate remembrance the inhabitants bear to the memory of Major Behm, so highly spoken of by Captain King. I heard, also, strange stories of the celebrated Benjofsky, who made his escape hence to Canton, having previously murdered some people, and fomented an insurrection. I heard nothing in his favour, although an old lady, afterwards my aunt,
563 was a companion of his. I found Bolcheretzk to be inhabited by a civil people, all Russians: but
000 were it otherwise it might be expected I should

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 speak highly of it, as the first place where my wife saw the light of day.

I could not fail of being a welcome guest at such a place, where neither tobacco, tea, nor spirits had been tasted for the last three months by any individual. Of course I left a small quantity of each article with my friends, making them, as it were, roll in luxuries, in return for which I received several sables and foxes as presents. The state of the river was such as to prevent my proceeding upon my journey in less than two days, which period I passed very happily, wandering over the extensive site of this ancient place; it is said to have formerly contained to the number of five hundred inhabitants, which have been reduced partly by the removal of the seat of government, and partly by disease.

Canoes being provided, I resumed my journey in a heavy fall of snow, and crossing three branches of the river entered upon a trackless maze of snow six and eight feet deep; so difficult to pass, that it was three o'clock the following morning before I reached Utka Ostrog, having been twenty hours in going fifteen miles. The route was along the sea coast, having far to the right an elevated range of mountains. Three miserable dwellings in an exposed situation, but with fine meadow lands, and plenty of game and fish, are all it can boast of. The chief was absent, hunting, and as I could not procure fresh dogs, I remained six hours to rest

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 those I had, and then proceeded upon my journey, reaching by midnight Kickchick, twenty miles, a place of equal wretchedness with the last, and like it containing but fourteen or fifteen inhabitants, most of whom are disabled from work by disease. With the same dogs I reached Kolofsky ostrog thirty miles along the sea coast, upon which a tremendous surf was roaring with a strong north-west wind. There are in the neighbourhood several fine lakes which never freeze, and produce trout and salmon peal of a fine flavour during the whole of the winter. Deer, mountain sheep, and game of every description that is found in the Peninsula abound in the mountains and forests, and fine meadow lands every where skirt the coast.

133 I remained to take tea with the old Toion, whom
563 I found to be a fiddler and a scholar, and depart-
361 ed for Vorofskoy ostrog, forty miles. The mountains now approached nearer to the sea-coast, and present some beautiful scenery. I put up at the abode of a wealthy Russian farmer, and felt highly gratified
161 in observing a small but fat herd of cattle. This is
361 considered a rich spot, yet it contains only nine
133 dwellings with about forty inhabitants, not enough to keep up the chase. The place is prettily situated on the Vorofskaya river, about four miles from the sea. There is a snug harbour at the mouth of the river, where the transports from Okotsk formerly visited, and the river is navigable to the village which retains the vestiges of a small fortress. The meadow lands about it are at once

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 extensive and luxuriant. The inhabitants provided
361 me with frozen fish, a delicacy I had so much en-
161 joyed on the Kolyma, with ducks and rein-deer meat, as also with dogs to resume the journey, which carried me to Kolpakofskoi ostrog, thirty miles, along a dreary sea beach. The village contains six dwellings and twenty people, who furnished me with dogs to Kroutogorova thirty miles further, a beautiful situation near the extremity of the almost level plane reaching from hence to Bolcheretzk. The famous Sopka, i. e. burning mountain, near Tchinsk, here becomes visible, and although the country is so rich, not a head of cattle is to be met with from Vorofskaya.

To Tchinsk are thirty miles of superior country, yet so deep in snow that we were obliged to take it by turns to go a head with snow shoes, at other times the government of a narte was thrown upon me, which I at first made but a bungling hand of. Tchinsk has twelve dwellings, it is consequently a considerable place! there are also two priests, brothers, whom I found drinking a
576 decoction of dried herb instead of tea. I felt angry with the Toion who had let slip eight dogs intended for me, and declined entering his dwelling, the strongest mark of displeasure which can be shown to these simple people. The poor fellow felt the slight so severely as he saw me entering another yourte, that I could not help regretting the deter-
361 mination I had made. To Soposhna it is thirty-five miles, which I travelled in company with the

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361 reverend pedlers, for every body here is a mer-
161 chant. I made them happy by a pound of tea, a
133 few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

487 At midnight I continued on for Kovranskoy os-
R trog, twenty-two miles. There is here a law oblig-
177 ing the Toions to have a path made within twenty-
.48 four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

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quently was obliged to go before upon his snow shoes; and such was his diligence from fear of reprehension, that he not only arrived before me, but arrived in five hours, a very short time to accomplish such a journey upon snow shoes. I found it the most miserable place I had seen for a long period, reminding me of Zashiversk in northern Siberia. The brows of the hills are covered with brush wood, with little other appearance of nature.

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From hence to Uskolofskoy ostrog are thirty-five miles, which I was obliged to do by walking and alternately driving a narte, and cannot say which of the two is the most fatiguing. The diseases prevalent in the place prevented almost any assistance being rendered us. There are no cattle, yet fine meadow lands. Fish and game are abundant. At this place I met with another old shipmate in the person of the brandy contractor, who accompanied me to the next station, Napanas, a village with six dwellings and forty people. The road leading to it is considered dangerous, owing to a large toondra or swampy desert which must be crossed; the dis-

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tance is forty miles. We passed the desert in a slight fall of snow, which had not been sufficient to obliterate the marks of the track, else we must have been compelled to halt whenever the snow overtook us. I did not arrive until two o'clock in the morning, having been previously hurled down a snowy declivity of one hundred feet in depth: at the bottom of which, I, guide, dogs and narte all lay huddled together; however vexed I felt inclined to

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000 be, I could not help laughing. The guide could hardly have intended a performance of the kind, which might have caused serious consequences; it is true, he was a little in liquor, but that was my fault rather than his.

The velocity and facility with which we had descended the declivity, was more than equalled by the difficulty we had in ascending from it. To drag me and the narte from the abyss required all the dogs of the other vehicles, as well as the help of all the drivers, yet we succeeded at length; when upon replacing the baggage, my pocket-book, containing passports and other papers relative to my journey were missing; this, though perhaps an imaginary evil would have been severely felt by me. For a long time we searched in vain, turning up the snow, and at last I gave them up for lost. Such a loss never did, nor probably ever will happen to any other person: the papers which formed its contents are not likely to be again granted. The poor guide was the picture of despair, and vowed to do penance if he could only recover them, which at last was effected through the exertions of the brandy chief. We arrived thence all well, and
535 fared heartily. Napanas contains eight dwellings and an excellent Toion, who induced the people under his command to show me the national dance. The poor fellows willingly obliged me, showing the improvements they have made upon the practice of bears, or rather, perhaps, on that of goats. The dance consists in a variety of distortions of features

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535 and limbs, all doubtless derived from the ridiculous and wanton customs of their ancestors. The dance of the Cossacks is equally bad if not worse, yet I have seen it often practised in Yakutsk by females who should have known better. The woman, who is the principal performer, commences the dance with a handkerchief extended by the hands, somewhat like our own shawl dances; now used to hide her face from one, then from another, but always with the object of singling out him whom she most prefers as her partner. In a most unbecoming posture she approaches the favourite from the centre of the room; now dropping her head with a pensive air alternately upon each breast or shoulder, while her hands are employed in committing outrages upon decorum. The man, having taken hold of the handkerchief, joins the dance; the woman now reluctantly affecting to quit, appears again as anxious to rejoin him; this sort of antic motion is continued, till at length the woman sinks as from fatigue upon her knees, and in the act of falling is dexterously recovered by the man; and thus the dance closes. The agility and imitative powers of these wild Asiatics are really surprising, and I make no doubt that were they to have an opportunity of seeing the modern improvement in the art of dancing, as *exhibited* now-a-days in various public theatres, they would be found capable of imitating, not only *bears* and *goats*, but *geese* also.

000 From Napanas I proceeded down the river of its own name to its junction with the Tygilsk, hav-

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000 ing previously sent the Cossack with the post, and my baggage straight on to the fortress. I reached the haven, where the brig Paul was laid up in the ice, with her lower rigging over the mast-head, I suppose to become frost bitten. She belongs to the government, and makes *one voyage annually to Okotsk* with bread, stores, &c. carrying back the furs which have been collected. A brig of one hundred and twenty tons is thus kept in commission to carry bread for a few people a distance of three hundred miles. Its commander, officers, and about twenty-five people paid and fed the whole year! I never knew a more shameful instance of inconsiderateness on the part of the officers of any place, in any country. This brig on an average is not more than fifteen days at sea in the course of the year, and ought if proper exertions were made, and proper encouragement given, to supply Idgiga, Tygil, and Yamsk with provisions; instead of which each of these places keeps a similar vessel. Tolerably good barracks and store houses have been built by the steersman, or commander, who has charge of the brig. The distance of the haven to the sea is ten miles, and below the fortress twenty, which last place I reached in time to dine with its commander, a lieutenant of the imperial navy, a young man who had held the situation near five years, but who will now shortly leave it, that being the period allotted for his continuation in service.

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133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer,
but its situation in winter is exposed and dreary. A
range of mountains from the NE to the SE defend
it in some degree from the coldest winds, yet it is
on the whole but a poor place. There are at pre-
sent twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word
comprehending Siberian fortresses, says, "It would
be dangerous to attempt storming them, for who-
ever wanted to mount the greatest and only bul-
wark, a wooden paling, would most probably come
to the ground with the whole structure about him."
Such I am certain is the present state of Tygil,
and which, with its half dozen Cossacks, can only
be held *in terrorem* over the neighbouring Koriaks:
the Kamtchatdales are not a people numerically or
physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hos-
pital erected; when they are to be covered in I
know not, though shortly I hope, for they are
much wanted. The ravages of a certain disease
at this place are indeed dreadful, and I should
think ought to call forth the attention of the govern-

361 ment so far as to induce them to export doctors to,
563 and import priests from Kamtchatka. I mean no disrespect to those reverend gentlemen, but just to hint, as my opinion, that instead of the soul only, it would be better to take care of the soul and body at the same time. The average number of people annually admitted to the hospital books is three hundred and fifty, nearly twice its whole population, who are chiefly employed in fishing and trading with the neighbouring Koriaks or Kamtchatdales. The place also serves to keep up the winter communication with Okotsk. For the Koriaks will not furnish rein-deer or dogs to carry the post, unless they are remunerated by a present of tobacco, spirits, &c.

000 From what I have seen of the Koriaks, both in Tygil and in their encampments to the southward, I have no doubt of their being of the same tribe as the Tchuktchi; they have the same features, manners, and customs, and the same language—the same love of independence, and are, in truth, less scrupulous of giving offence to the Russians than their northern neighbours, for they frequently break out in hostility with the inhabitants of Tygil, unless a supply of spirits and tobacco is sent to them, for which, however, they barter reindeer and furs.

132 The climate of Tygil is cold; already had the
563 thermometer passed 28° of Reaumur. The Cossacks however, contrive to raise a few vegetables, as po-

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563 tatoes, cabbages, turnips and radishes; but the two
137 former never arrive at complete maturity, the one being waxy, and the other without a head. The famous antiscorbutic cheremsha, or wild garlick, abounds, as does a small but delicious root, somewhat resembling a sweet potatoe, called, in the language of the country, kimtchiga. There is also an abundance of wild berries in the neighbourhood of Tygil, yet their chief support is fish and rein-deer, of both which I partook at the hospitable table of
000 the commander of the fortress. At the expiration of four days I departed, having remained so long to recover my feet, which had been severely frost-bitten from wet.

I was accompanied by the commander of the transport lying in the Haven: he was what is termed a good, though a droll, fellow; and I was
133 gratified with his society. Our route lay at first
361 up the Tygil, which from its source to near the town runs through an interesting country. At midnight we reached Sedanka, a small village, containing six dwellings. From thence to Bolcheretzk is called the Tygil coast, which, generally speaking, is low and flat, the sea-coast being from thirty to forty miles from the mountains. The villages through which I had come were all of them upon the banks of some small streams, which, in most cases, rise in the mountains; but sometimes they emanate from the lakes, which are numerous. The rivers I do not apprehend to be

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133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to
133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga;* we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

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132 and his dogs: nothing can exceed the devastation,
133 or be compared to it, but the effects of the wind on sandy deserts or mountains. I have known instances of people detained for twenty and thirty days in this tremendous pass, and it is seldom that it is crossed without a gale. And yet all this difficulty and danger might be obviated simply by the erection of crosses or mounts, as in the northern parts of Siberia, where I have seen in the distance of thirty or forty miles, a small mound of earth, with a white and black chequered cross placed at every one hundred and fifty yards.

133 The night was exceedingly cold, and the snow
137 and wind prevented our even enjoying the luxury of a cup of tea, for no fire could be lighted. Crossing a second toundra, desert, of seven miles wide, with infinite labour to the dogs as well as ourselves, we entered upon a most magnificent country. Lofty, straight, and stout firs lined the right of the valley, while the dwarfish larch, and alder, mixed with birch, stood upon the left in all their bandied and
000 crooked shapes. The contrast was extremely pleasing as we glided along the milky valleys at a rapid rate. Immediately upon clearing the desert the snow and wind ceased, and we hailed the return of fine cold weather. Not long after we overtook a caravan of nartes in great distress, having been detained ten days in the mountains by the weather. The dogs had been without food for three days, and were evidently in the last stage. In the early

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000 part of the evening we reached the Yelofka river, which unites not far hence with the Kamtchatka, running in a picturesque manner through the coun-
361 try. At seven we reached the ostrog of Yelofka,
161 fortunate in having crossed the mountains so safely.
133 Yelofka is a pleasant village of eight dwellings and forty-six people, the country round it is elevated and well wooded. We remained only a few hours to refresh ourselves, and then continued the journey along the river of its own name, the banks of which afford some beautiful scenery for about fifteen miles. We then came to a desert which we crossed in a purga, fortunately not very heavy. At forty miles we reached the village of Khartchina of
000 five dwellings and thirty inhabitants. I was welcomed to it by a respectable looking old man, a priest, son to the highly eulogized priest of Paratounka. The son perfectly well remembered Captains Cook and Clerk; he having been at that time a young man, living with his father at the village of Paratounka. Several uninteresting anecdotes were related of them, as also of Perouse, in their rambles of shooting or chasing the wild animals. I had at Yakutsk been recalled to the remembrance of Captain Cook by a silver watch, which now belongs to Captain Minitsky, of the Russian navy, and which, I think, is spoken of somewhere as having been given away by that great navigator to some individual merchant. He probably disposed of it, and thus at last it has fallen into the hands of the pre-

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000 sent holder, who, though I feel assured he appreciates it highly, yet would not retain it, should relations, or others more nearly concerned, express a desire to be possessed of so valuable a memorial.

133 From Kharchina the route lies over a large lake,
137 and thence over a fine open country, abounding
361 with some of the finest fir-trees I have ever seen, reaching to the height of sixty and eighty feet. At twenty miles we reached the ostrog of Kamennoy, on the right bank of the Kamtchatka, and, changing dogs, proceeded twelve miles farther to Kama-
136 kie over numerous lakes near the river. The coun-
361 try here abounds with red foxes, and is certainly one of the most picturesque parts of the Peninsula: the beautiful view of the Sopka, or Peak of Cliuchie, was hid in the clouds. I movedon to wards Nishney Kamtchatsk, also an antient capital in the Peninsula, a far more eligible place than the pre-
000 sent site. The weather had now become very mild, no less than 3° of heat of Reaumur. We made good about seven miles of our journey through very deep snow by the ensuing morning. For three hours we did not move forward more than one mile, a heavy fall of snow had taken place, and it was found impossible to proceed, owing to the extraordinary heat of the weather. No track nor scent offered to the dogs, otherwise I would have persisted in the prosecution of my journey. The drivers, however, with snow shoes actually sunk eighteen inches deep in the snow, and I was therefore com-

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000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

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133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
. 65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.
563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

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563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

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164 havoc the introduction of the small pox, and an-
other distemper, made at the ostrogs on the banks
000 of the Kamtchatka. Remarkably fine and extensive
meadow lands, attend the traveller all the way
from Cliuchie to Kozerofsky, as well as noble
forests of timber; and there are seasons when cat-
tle might maintain themselves during the whole of
the winter, the snow being then of no great depth;
yet there are but few heads of these necessary
animals. The scenery to the southward along the
banks of the river, is also of the most picturesque
and sublime appearance. The magnificent peak
soaring to the clouds has a fine effect when viewed
from the bed of the river.

361 Kozerofsky, forty miles beyond Oushkielova,
161 contains five dwellings and thirty-six people, and
is pleasantly situated. I continued along the river
Kamchatka for twelve miles, and then along that
of the Tolbachinsk to an ostrog of the same name
for thirty miles more. The latter part of the journey
was through a crowded forest, and a thick fog,
which occasioned me some serious blows, as the
dogs made their rapid progress; now and then start-
ing at the scent of a fox or sable. Tolbachinsk is
a pretty little village with thirty inhabitants, and
appears to be on the improvement; the establish-
ment is a new one and almost secluded from the
world. Stchappinat was the next village I came
to. It is upon the Kamtchatka, at a deep and nar-
row part of the river which was not yet frozen

137 enough to bear the nartes. I crossed two other
small rivers by bridges for that reason. The scenery
was very beautiful, a lofty range of mountains lay
to the east with a good deal of fine timber, while
the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them
to the seat of government as presents to the chief
and officers. The causes of their comparative scarcity are probably the depth and rapidity of the
river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is
seldom that the inhabitants can provide themselves
with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the
neighbourhood, feeding on a rich pasture which
runs to Kirgannick twenty-five miles further, where
I got sight of the magnificent mountain scenery
over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains
fifteen houses and one hundred and twenty inhabit-

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361 ants received me next, a neat place abounding in
563 cattle, if thirty or forty of them may constitute an abundance; there are however no animals of the chase. A handsome church has of late been erected under the auspices of Captain Golenistcheff, the second in command of the peninsula, whom I found expecting my arrival. I continued for Verchney Kamtchatsk, also a peasants' village, but was obliged to return owing to the inefficiency of the
361 dogs, although distant only eight miles; I at length
563 reached it much fatigued, having come through
R a pretty place called Schegatchik, where some Cos-
177 sacks are stationed to take care of a few heads of
. 23 horned cattle, and four or five horses, which belong to the government. The situation is beautiful, on a branch of the Kamtchatka, which makes a semicircular indentation into the land, just opposite to Verchney Kamtchatsk, forming an island opposite to the junction of the Gatchick and Milkova.

000 I procured fresh dogs at Verchney, a place on the decline, and proceeded towards Sherom twenty miles, situated in one of the most romantic and enchanting valleys in the peninsula. I there met with the Ispravnick and eighteen nartes engaged for the collection of the yasacks, public and private, as well as for trade. I felt gratified to meet them, as I received good news of my affairs at the seat of government; and learnt also that there was a road before me to cross the desert, lying towards Malka. The Ispravnick had been detained four-

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574I continued on for Pouschin, twenty miles, and
576arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants,[1] amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of
scrofula is become hereditary. In this part of the
peninsula the chase is scarce, and the inhabitants
mostly subsist upon fish, a few mountain sheep, and
wild rein-deer, being the only meat they taste from
one end of the year to the other. The situation is
fine and highly productive in fish, but at this mo-
ment there are not a sufficiency of people to trans-
act the ordinary business; a circumstance which
calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous coun-
try, which is more than compensated by the suc-
ceeding richness of a valley eighteen miles in
length. I crossed several times the Bistra, a
rapid stream, uniting with the Bolshaya Reka, and
was again obliged to become pilot, chief, and dog-
master; however, I managed very well, and ar-
rived early. Malka is deserving of little notice,
yet is said to be celebrated for its baths! The
situation is magnificently grand; the hospital
stands in the bosom of a lofty chain of elevated
mountains at two miles from the village. I was
welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

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758 are doctors. Having refreshed myself, I proceeded
R to examine the hospitals and baths, all of which I
177 found in a disgraceful state of filthiness and decay.
. 75 There are two hospitals, one for the Kamtchatdales and a smaller one for the accommodation of the officers. There are also two baths, both ill contrived, and in want of every necessary and convenience which persons who have recourse to them require. The hospitals are without medicines, and the baths without flannel gowns, blankets, sheets, or towels; nor is there even a warm passage for the patient from the bath to the hospital; he must come from a place, where the atmosphere is equal to 25° of heat, and pass through a current of air where there may be 15° or 20° of frost. There never was a place where more could and ought to be, or where so little has been, done for the benefit of so wretched a people. The late chief doctor was five years in the command of this hospital, during which period he did nothing but keep his patients increasing in disease; indeed it may be considered a fortunate circumstance for the Kamtchatdales, that the governor was obliged to send him as surgeon of Captain Vassilieff's ship, in lieu of the proper surgeon who remained behind at sick quarters. Not even the most common vegetables have been raised; and but for a few cows, the benevolent present of Captain Rikord, the chief, I hardly know what there would be of the really useful for this establishment, which certainly owes

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758 nothing either to the industry or humanity of the
R doctor before alluded to.

177 The state of some of those miserable creatures
. 75 whom I saw in the hospital, was such as absolutely to prevent the doctor from dressing their wounds; of course I am incapable of describing them. They are allowed by the Emperor one pound of bread and half a pound of meat per day. They have also fish in abundance, and wild berries are to be found every where round the place. The patients, being all afflicted with one disease, are cramped up into one small space, never to go out but at their own desire, nor do any work, though they might raise an unlimited quantity of vegetables from the grounds covered with the warm vapour. In short, instead of being as it is, a place calculated to engender and nourish disease almost to pestilence, it might be, at a trifling expense and with proper care on the part of the head doctor, one of the most humane and efficient establishments on the face of the globe.

312 With respect to the nature and quality of the baths, they had a strong smell of sulphur, and an unpleasant taste. The hot and cold springs are united at the baths, and it is a strange circumstance, that the one should always be boiling hot in 25° of frost, while the other at 30° of heat is always below the freezing point. These were the only remarks my short stay, in the month of December, could enable me to make. I should, how-

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I should how-
753 ever, in justice observe, that the present head doc-
R tor, if it be Mr. Gramatin, who was my shipmate in
177 the transport from Okotsk, is a man of great talents,
.75 perseverance, and industry; and had, previous to my leaving the Peninsula, seven months after my arrival and visit to the hospital, cleared the place of three-fourths of the patients, and sent them to their homes quite cured. He had no remedy but surgical operations, and succeeded in first putting the patient to sleep, and then cutting out all the afflicted parts. To the truth of this statement, extraordinary as it will doubtles appear in Russia, I beg leave to add the attestation of Dr. Zaerzerfskey, who was with me at the hospital at the time to which I allude.

000 My route from Malka to St. Peter and St. Paul's was over a highly picturesque valley, and in beautiful weather. I soon reached Nachikin and Koraki, and, changing dogs, proceeded very pleasantly till midnight damped our satisfaction a little with a fall of snow. We halted to refresh the dogs, and lay down till the peep of dawn enabled us to proceed, and we reached Avatcha by noon. But no dogs were to be procured there except three which carried my little baggage; I therefore proceeded on foot, and reached the haven at about three o'clock. My entry, alone and unperceived, was widely different from my departure:—my sensations were correspondent. In melancholy mood, leaving my betrothed for the sake of wandering

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000over a long and painful journey; returning delighted to have done so before I should be made most happy, by finding that betrothed true, and all that I could desire,—but no more of this.

Having thus completed the tour of the Peninsula, it will be proper in this place to enter on its description, with that of its inhabitants, their manners, customs, &c.

CHAPTER XI.

General Observations on the Peninsula of Kamtchatka.

000 KAMTCHATKA is a large peninsula of an elliptical figure, extending from the latitude of 59° to 51° N; the breadth is inconsiderable. A magnificent chain of mountains, with numerous sopkas or peaks, extend from north to south, the whole length of the peninsula, from which mountains numerous rivers, large and small, find their way into the ocean. Of these the Kamtchatka is the only navigable one, admitting vessels of one hundred tons as far as one hundred and fifty miles up the stream. All the rivers are, however, crowded with fish of superior flavour. There are also lakes of considerable size, and so numerous, that all intercourse between the several parts of the Peninsula is, during spring, summer and autumn, effectually precluded.

132 The productions of the country are few but va-
137 luable. There is an abundance of wood, as fit for ship-building as for general use. The finest timber is found on the banks of the Kamtchatka, Yelofka, and eastern coast, but the climate is such as to induce me to believe that neither corn nor vegetables will ever attain to great perfection; the soil in all seasons, at the depth of twenty-four to thirty inches, being frozen. Potatoes never ripen, cab-

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132 bages never come to a head, and peas only flower;
137 but turnips and radishes thrive amazingly. Grass of the most nutritious quality is found in the greatest abundance, as well in the numerous meadows as in the forests. It grows to the height of between five and six feet, and in some places three crops are produced within the year.

132 Winter may be said to occupy near one half of the year, spring and summer the other half. The winters are mild when compared to those of Siberia; the thermometer never descending, in the southern parts of the Peninsula, below 20° of Reaumur, and seldom below 12° and 15°. Spring is the most agreeable time, just when the leaves put forth, and it is then the fishing commences. The summer is the most disagreeable portion of the year, owing to the heavy rains and heavier fogs which come from the eternally snow-clad mountains. The greatest heat is in July, when the thermometer is at 27° and 28°. The snow lying upon the ground seven and eight months will sufficiently account for the want of cultivation, but indeed the remaining four can hardly be considered as equal to more than two months in other places; for the sun at St. Peter and St. Paul's has no effect upon the earth during more than four hours of the day, and from the immense height of the mountains, it is only from ten o'clock until two that any heat is felt.

251 This absence of heat, and these changes of climate, with the very heavy fogs, which account for

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251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

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136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

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251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

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157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

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181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

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177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpri-

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162 ing degree is a question I shall not answer, farther than by reminding my readers that at the discovery of Kamtchatka, we are told in the Russian history, that no less than one hundred and sixteen villages
164 were on the banks of the river Kamtchatka. The
162 small-pox, and its rival distemper, with other diseases, and above all the spirit of persecution which has been unremittingly practised towards these poor people, have been the several causes of the depopulation. Of late, however, I can with certainty say the population has not decreased; this may be owing to the benefits arising from vaccination, as well as somewhat better medical attend-
162 ants. But although population has of late kept its
563 maximum, it may be a question whether the aborigines have not decreased in the same ratio that the Russians and convicts have increased. At present there are several Yakut as well as Russian exiles, in the peninsula, neither of whom can be of much benefit; but both assisting to persecute and plunder the Kamtchatdales.

175 Of the history and origin of the Kamtchatdales little positive has ever been known; and that only for the last one hundred and thirty years. Kamtchatka is supposed to have been visited by some Russians in 1649, when one of the traveller Deshneff's vessels, was wrecked on its coast. Those Russians lived with them in peace for a considerable period of time; but quarrelling among themselves were murdered. Nothing more is known of the place

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175 until Vladimir Atlassof discovered the peninsula
in his excursions from the Anadyr, from which
time a constant petty warfare continued between
the Russians and natives, until the general revolt
and massacre in 1731. Since this period, the pe-
ninsula has not been greatly troubled with either
171 conspiracies or massacres. Little doubt can exist
177 that the Kamtchatdales are of Asiatic origin; of
181 this, their features and customs, as well as their
dwarfish size, are evident tokens. I have read
several dissertations upon the subject, but disagree
with most of them. My own opinion is formed
from ocular demonstration alone, and not from a
study of the circumstances under which they
labour. Their having progressed from America is
indeed a ridiculous idea; and their having learnt
many secrets, as causing fire by friction, &c. from
the inhabitants of the opposite continent, is just
as probable as the other sagacious notions, that
they were the teachers. How, in either case, could
they pass that formerly ferocious and warlike race,
the Tchuktchi? Or if they had come from the
north of Siberia, from Irkutsk or Yakutsk by
Okotsk, and Idgiga, how did they pass the still
more fierce and barbarous Koriaks? The idea is
absurd; and the only one I can for a moment en-
tertain is, that they are a Mongole tribe, who were
driven down the Amoor, and passing along the
Kurile Isles, reached Kamtchatka. A few of the
same race are still the inhabitants of those isles,

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171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they
are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the
same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such
productions of the country as I have not noticed
may be found in Cook's and other travels. I will
therefore proceed to compare the present happiness
of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

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231 R 177 .23 ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65 The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 758 R 177 .75 The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

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164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

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273 Another great cause of this ravage in population
435 has arisen from the introduction of spirits: a Kamt-
563 chatdale will sell his last sable or fox for a glass
733 of it, though he is not physically strong enough to drink any thing of the kind. When it is considered that sixteen thousand bottles of this trash are consumed in the short period of three or four months by six or seven hundred people, we may well feel pity and surprise—pity for the poor women and children, and surprise at the means of getting either the money or sables. Such a quantity of spirit ought to sell for fifty thousand roubles, which is one hundred per cent. upon the price at Okotsk, but it is in reality sold for twice that sum. When it is recollected that officers, soldiers, sailors, merchants, and priests travel round the Peninsula for the purposes of trade, it will be less wonderful when I assert that each bottle of spirits sold to the Kamtchatdales, produces the value of ten and twelve shillings. Now allowing half the quantity imported (eight thousand bottles) to be consumed by the aborigines, this would produce from eighty to one hundred thousand roubles, while the cost is, in Okotsk, only twenty-five thousand. I have seen a bottle of spirits sold for a sable, and afterwards, when the party was drunk, a bottle of adulterated liquor has fetched the same price: in short, I have seen three and even four sables given for two bottles of spirits.

Allowing seven hundred and fifty families of the

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273 Koriaks and Kamtchatdales, which is five to each
435 family, and that half the quantity of imported spi-
733 rit is consumed by them, it will appear that each family consumes at least twelve bottles in four months. By this plan the poor purchaser is drunk for days together, and for the rest of the year can get nothing to cheer him under his depression. The cost of that spirit to the Kamtchatdales is one hundred and fifty or two hundred roubles, a prodigious sum for a poor family to expend upon an article so pernicious in its moral and physical effects. Such a sum of money in Kamtchatka would produce near six or eight hundred pounds weight of flour; enough to support a small family during a whole year: or, such a sum would enable them to purchase proper clothing, culinary utensils, nets, twine, tobacco, axes, and knives. The evil of these grog-shops is carried to so ruinous an extent, that the children of the natives are left for three and four days without any food, save yukola, dried fish, doled out to them one or twice within that time. I have known instances of mothers and children being left without any means of support, in consequence of the retailing of such trash being allowed. The yukola and the bark of trees is, in such cases, almost the only nourishment the women and children can procure for several days. If they happen to be possessed of a cow, they are considered very fortunate. It needs little philosophy to prove that it is only by taking care of the rising

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273 generation that the stock itself can be preserved,
435 which will not long be possible, if spirit continue
563 to be transported and retailed out as it now is.—
R While making these reflections in England, I am
177 aware that the Russian Government have desisted
.27 from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

651 The abuses arising from the collection of the
661 yasack are most cruel. The yasack itself is incon-
R siderable, but from the arbitrary manner in which
177 it is collected, it is rendered odious and oppressive.
.65 The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

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651 poor family has been ruined through the cruel and
661 oppressive conduct of these tax-gatherers, not from
R a deficiency of the *legal* dues, but of illegal dues.
177 The mode of taxation in each ostrog is also highly
.65 objectionable, and sometimes rendered cruel. They are not taxed as a people but as a place, and it not unfrequently happens that the village which formerly contained forty or fifty able people, and was taxed as such, does not the following year contain more than twenty or twenty-five, in consequence of illness or removals. There is, however, no remedy, the yasack of the whole must be paid by the few. It is also not a little singular that each ostrog is taxed in money, and yet money cannot be received; the duplicity of this act is too apparent to be mentioned, yet it would be seen that the government must be unacquainted with a fact of the kind, for the difference in the amount of the tribute would not equal one hundred pounds. Instead of the sum of money at which each village is rated, the inhabitants are obliged to pay furs at one fourth the value. Sables of the finest quality, and worth forty shillings a pair, are never averaged at more than ten. It would be more honest to increase the nominal tribute of money, or put a specific tax on furs, which would be felt less severely, because an appearance of candour would accompany it.

651 The next galling tax is that levied for the tax-
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563 gatherer himself, and this is a greater grievance
R than that levied on behalf of the Emperor, and
177 under more humiliating circumstances. Each os-
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trog, and each Toion or Chief of it, is also compelled to pay the same tribute to his actual Chief as to the Emperor himself; so that the yasack is *de facto* paid at least five times over.

Nor is the impolitic system of collecting the tribute more injurious than that arising from forced or gratuitous services, such as the forwarding of the post, the transport of flour and salt, and the issuing of padvodies, or forced levies of horses or dogs, to officers and favourites. This is indeed an intolerable abuse, and calls loudly for redress. There can be no doubt but that if the proprietors of dogs were rewarded at a proper time and in a proper manner, they would as much court the employment as they now abhor it. According to the present plan the natives lose their time, their dogs, their health, and their provisions. Any favourite or officer who may wish to trade is furnished with one of these free billets, which authorizes him, upon the plea of public duty, to call out men and dogs. While the manner of the officer or favourite seems to intimate, that he confers an obligation upon the Chief of the village by his acceptance of a couple of sables as a present. Nor is this all: not content with the present, the party travelling has the privilege of trading, and buying just as many more sables as the poor aboriginal may have caught, and which are invariably sold for just such a consideration as the officer may incline to give.

If a governor or officer be compelled to travel upon public service, and receive from the Crown a

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sum of money to pay travelling expenses, it seems very strange that such money is not paid to these poor people. As little can I understand why a post should travel gratis: surely the poorest and most distant part of the Russian empire, should not be oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

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With respect to the pedlers, here denominated merchants, they in truth ought to be taxed severely, as well in regard to the goods they bring as the price at which they are sold, the articles being such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future

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necessities. The quantity of articles hawked about by the merchants consists of tobacco, spirits, silks, tea, sugar, nankeen, and cotton handkerchiefs. Every Kamtchatdale keeps open house, and upon the arrival of a Russian his door is held open, the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to be held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 each family of the aborigines be compelled to take
from the government one pood of flour per month,
at the price, say, of a sable or fox skin. The result
would be, that government would issue an extra six
thousand poods of flour at an expense of sixty thou-
sand roubles, in return for which they would receive
six thousand skins, worth at least ninety thousand
roubles; leaving a gross profit of four times the
price of the present yasack, and actually assisting
the Kamtchatdales by the abandonment of a direct
tax of half the amount—to say nothing of the bene-
fits which would accrue from such a measure to the
females and children who are now left for many
days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single
man pays a heavy tax, a married man a heavier,
and a father the heaviest of all. Such conduct is bad
policy on the part of government, and carries with
it more the appearance of a wish to extinguish than
to increase the population of Siberia.

437 I have already commented upon the evil effects
563 arising from forced levies, and forced services; of
661 the transport of flour, salt, spirits, the post, as well
R as officers from one place to another without any
177 remuneration to the inhabitants. Of the conduct of
.66 these travelling gentlemen, high and low, it will be
sufficient to give a specimen. The officer, upon
arriving at a village, is received by the Toion or

29:Cochrane T-2 (1821-22)1824 Kamchadal

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Chief, and conducted to the warmest and cleanest part of the yourte. His upper garments are taken from him, cleared of the snow and put out in the open air for the night; it being understood that the colder the dress is put on in a cold country, the warmer it ultimately becomes. The landlady, or Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

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I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

29:Cochrane T-2(1821-22)1824 Kamchadal

000out of every forty is supposed to be paid to the emperor upon their arrival at Okotsk, but it is very difficult to insure any payment of such a tax except from the regular traders, and they also manage to defraud the government of the proper dues. The value of the furs varies; a sea-otter is worth thirty-five pounds; a river-otter, two pounds; a black fox, twenty pounds; black and white fox, ten pounds; brown fox, two pounds; a common fox, twelve shillings; and a white or blue fox, as little as two shillings and sixpence; sables vary from eight to twelve shillings. For these bread is bartered at eight shillings the pood; tea at twelve shillings the pound; sugar, four shillings, and tobacco three shillings the pound; in short no article is sold for less than four hundred per cent. profit upon the actual expense of fetching it from Canton; with the advantage in that case of procuring all sorts of coarse cottons, nankeens, and handkerchiefs, besides iron utensils.

The American Company might, and ought to contract with the government for supplying flour to Okotsk, Idgiga and Kamtchatka, for which about forty thousand poods are annually required. Their abundance of unemployed vessels would also enable them to furnish the aborigines with every thing they require, at a cheap and yet a profitable rate. But such is the pertinacity and jealousy of those composing that body, that they will do nothing even to benefit themselves, if it be also of

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 benefit to others. And thus, a trade with Manilla, Canton, the South Sea islands, California, Calcutta and Japan, as well as the establishment of a whale fishery are sacrificed; and the eastern frontiers of the Russian empire remain in their original barren, impoverished, and savage state, instead of boasting a flourishing trade carried on by a civilized, organized, and friendly population. The produce of the above mentioned places might be warehoused in Kamtchatka, and in the ensuing summer be transported to Okotsk, and thence over all Siberia.

The drying and salting of fish, the felling of timber for furniture, and the countenancing of agricultural pursuits, could not fail of benefiting Kamtchatka; but the whale fishery would, above all things redound to the honour and interest of Russia. It may not be amiss to add, that the importation of foreign corn would much assist the Yakuti; its immediate effect would be to save the lives of twenty thousand horses, which are annually sacrificed by hard work or famine. Formerly, when the horses were more numerous, from eighty to one hundred thousand were annually employed between Okotsk and Yakutsk by the merchants, the American Company, and the government; at present there are not more than thirty thousand. Of these, at least one half are sacrificed, and the remainder rendered unfit for a second trip. The whole number of horses annually sacrificed does not, it is said, fall short of fifty thousand; so that ere long they will also be

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 extinct, and with them the very being of the Yakuti, who are even now going down in an equal ratio.

231 R 177 .23 Much benefit has been derived to the colony from the exertions of the present Chief, Captain Rikord. The rule of never allowing a cow to be killed until she is past calving, is in itself excellent, but the stock on hand is so small that a century would elapse before what can be termed herds of cattle could be seen wandering and feasting upon the almost unbounded pastures of the peninsula. What the different chiefs have been doing for the last fifty years, Heaven alone knows! When Captains King and Clarke were here, they seem to have taken it for granted, or to have been informed, that cattle of all descriptions were in a flourishing state. From the proximity of Okotsk to Tygil, a couple of transports might, in one summer, transport at least one thousand head of cattle, which, repeated for ten years, would place the peninsula in an absolutely enviable situation. This act of humanity would be attended with no expense to the government; the Kamtchatdales would willingly pay the value in sables, and the result would be, that no part of the vast Russian empire would be richer or better provided with food of various descriptions than the distant province of Kamtchatka.

134 241 R 177 .24 Upon the banks of the Kamtchatka, where the land lies distant from the salt water, and sheltered by the mountains from the east winds; as well as

29:Cochrane T-2 (1821-22)1824 Kamchadal

134 on those banks which have been enriched by the
241 lava emitted by the volcanoes, barley, oats, and
R rye have been produced, but in no instance with
177 so much success as to pay the labour. The pro-
. 24 ductions, it is true, have been a little more varied and a little riper, but rarely consumable. In spite of this fact, the gazettes of St. Petersburgh formally and officially announce this year that a quartern of rye produced nine quarterns, and that the size or weight of a common potatoe was three quarters of a pound. Three quarters of an ounce would be a sufficient tax upon credulity: I have no hesitation in saying that both these reports are fabulous in every sense of the word, for I have never seen a potatoe in the whole province either ripe, or larger than a hen's egg.

If large herds of cattle were distributed on the banks of the Kamtchatka, and other favoured places, with the benefit of manure, agricultural implements, and knowledge, no doubt the soil might be made to answer the purpose. I certainly cannot conceive the climate of Kamtchatka to be such, as of itself to preclude the pursuit of agriculture in some of its minor branches, as I consider the soil to be much superior to that of Connecticut, or Massachusetts, or either of our Canadas.

231 In the vicinity of Avatcha are to be seen, what are by some termed artificial enclosures, within which cattle were formerly maintained, but I conclude them to be natural enclosures formed by the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert
563 to one or two points not hitherto dwelt on. The
793 children of the natives receive no education, and
871 the children of the Russians but little more. There
R certainly is a school existing in St. Peter and St.
177 Paul's, governed by a priest, and regular school-
.87 master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see
563 how the boys could be kept alive. Of the clerical
793 gentlemen themselves, I may observe, that they
R maintain a great distinction between practice and
177 precept. They are very numerous: I know not what
.79 so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 sides trade. Of late the Emperor has given the cler-
793 gy an allowance of flour as well as a regular salary,
R and it may therefore be hoped that the natives will,
177 at least, be so far benefited as to have fewer of their
. 79 visits, except on their spiritual concerns.

Whether the Russian government will pay any
000 attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing re-
133 markable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also
132 emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

[in the winter of 1821-22--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 end of May the snow had entirely disappeared, and Spring, in the course of a few days, made her welcome appearance; wild flowers and vegetables were every where springing up, and enlivening the dreariness of the last seven months. Even the rigging of the transport which was to carry me back, excited my interest, and reminded me of former times. The attention of the inhabitants was sufficiently engaged by the accession of fish, as herrings in the inner harbour, cod in the outer
222 haven, and seals every where. Some among them proceeded to the islands at the mouth of the haven, and brought in some thousands of eggs, while others were out in shooting parties, sending us in snipes,
132 wild ducks, and partridges. The wild garlic made its first appearance at Cape Garlick so early as the 15th of May.

000 Only a few individuals died in the hospital, most of them with the scurvy; the remainder were soon restored to sound health by Spring and fresh fish. Our evening walks were sometimes extended to the summits of the hills, where we took our tea or smoked a segar; but latterly the little place,—I cannot call it a town,—became overflowed from the melting of the snow, and it was with difficulty we could move about. In the month of June a vessel arrived from Canton and Manilla, in ballast, having failed in procuring a cargo of flour. By that vessel I received a most friendly letter from Mr. Urmston, the chief of the British factory, together

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 destitute of society; the Creoles of their being
609 kept in a state of poverty; while the Kamtchat-
631 dales bitterly lament the association with either the
R one or the other. It has been observed that St.
177 Peter and St. Paul's can never be a good town,
.63 owing to its want of wood. It may be asked, why then was the seat of government removed from a more eligible place, Nishney Kamtchatsk, or why was it not removed to the centre of agriculture and population, so far as either can be said to exist? It has been already changed three times, and is, I be-
631 lieve, destined to another removal. Kamtchatka
R neither can nor will thrive so long as its chiefs are
177 sent for five years only: such a short period
.63 scarcely allows them the time of doing good, however well disposed they may be. The general mode of occupying the allotted term may be thus described. The first year is employed in looking about and forming places for the improvement of the country, the amelioration of the condition of the aborigines, &c.: the second year is passed in making reports, stating opinions, &c.: the third year brings the reply of the government, directing or authorizing the mode of administration: the fourth is employed in preparing or at most in acting upon such orders: while the fifth and last year is generally employed in preparing to return to Europe, and levying a parting contribution:—and thus the whole five years are, more or less, taken up in trading and accumulating as much

29:Cochrane T-2 (1821-22) 1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters will be found, who will prefer to administer justice with clemency and honor, to the degrading of their characters by a mean and derogatory traffic. If an increase of rank, double pay and provisions, an extra pension, and the most unlimited powers are not sufficient to ensure a just discharge of the duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

29:Cochrane T-2 (1821-22) 1824 Kamchadal

291 the inhabitants make their parkas and all their warm
237 clothing, which are also exceedingly comfortable
132 and beautiful. The climate of the islands resem-
134 bles that of St. Peter and St. Paul's. The soil is
231 generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

133 The second island, about ninety miles from the
161 first, has seven yourtes, with thirty-five males and
651 forty-two females, paying tribute for itself and
R the fourteenth isle, nominally, thirty-five sea-
177 otters; that is, twenty-three foxes and one hun-
.65 dred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very im-
101 perfectly surveyed. The inhabitants are supposed
197 to be of the same origin as those of Kamtchatka,
302 though they differ in the custom of wearing long
651 beards, which was probably introduced among
R them by the Russians. Their dialect is the same
177 with that of the inhabitants near Cape Lopatka;
.65 from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

29:Cochrane T-2 (1821-22)1824 Kamchadal

136 first and second isle, to bring the tribute and furs. Foxes are said to be the only animals of the chase, and here they abound in all colours. Sea otters were also formerly taken, and still, at intervals, visit some of the islands. Excepting those caught near Nishney Kamtchatsk, they are considered the most valuable of the species.

[on the norther Kuril Islands--Analyst]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

cerning them. For these reasons I hope readers of every 000
denomination will favourably receive this description of *Kamtschatka*, designed both for use and entertainment. The author, if death had not prevented him, would himself have explained the occasion that gave him an opportunity of being informed of all these particulars; and, as such an account may be expected, I shall endeavour to do it for him in as few words as possible.

In the year 1733, her Imperial Majesty *Anne* ordered an expedition on foot to examine the coast of 121 122
the Northern or Frozen Ocean, likewise that to the East about *Kamtschatka*, and from thence to *America* and *Japan*; and also at the same time to make out a description of *Siberia*, and particularly of *Kamtschatka*; to observe the situation of the places, their natural history and inhabitants, and whatever else might be necessary to a full knowledge of those people. To this end three professors of the Imperial Academy of Sciences were sent along with the sea-officers. These three gentlemen divided the task amonst them; one undertook to make the astronomical and physical observations; the second to remark whatever regarded natural history; the third to draw up a description of the people and country. To 122
these members of the academy several other proper assistants were added: these were six *Russian* students, who had an opportunity to improve themselves while

5: Jochelson A-5 (1910-11) 1928 Kamchadal

PREFACE

●121 In 1925 the Carnegie Institution of Washington published my report, *Archaeological Investigations in the Aleutian Islands*. The present work deals with the archaeological investigations in Kamchatka, based on fieldwork conducted by the author in 1910–1911 at the expense of the late F. P. Riaboushinsky, Moscow banker, and under the auspices of the Imperial Russian Geographical Society. Both works form a part of the results of the author's studies as a leader of the Ethnological Division of the so-called Kamchatka Expedition, and may be regarded as publications, in English, of the Russian expedition. The reasons for the study of the Aleutian Islands by the Ethnological Division of the Kamchatka Expedition are given in my work *Archaeological Investigations in the Aleutian Islands* (page 2).

113 The leaders and members of the other divisions of the expedition, who worked in Kamchatka only, are still working out their material. The following publications have appeared in Russian. Professor P. J. Schmidt, member of the Russian Academy of Sciences and leader of the Zoological Division, published the first volume of *The Zoology of Kamchatka*, Moscow, 1916 (1–432 pages, 4°). Professor V. L. Komarov, member of the Russian Academy of Sciences and leader of the Botanical Division, published the first volume of *The Vegetation of Kamchatka*, Moscow, 1912 (1–458 pages, 4°). Dr. V. A. Vlasov, the chief of the Meteorological Bureau of Moscow and leader of the Meteorological Division, published Volume I, Part 1, *The Climate of Kamchatka;* Part 2, *Kamchatka's Waters*, Moscow, 1916 (I–VII, 1–370 pages, 4°).

The above Russian publications of the Kamchatka Expedition were not written by the division leaders alone, but there are also contributions by their assistants, fifteen in number, specialists in different branches of zoology, botany, geology and meteorology.

The leader of the Geological Division, the mining engineer and member of the Geological Survey of Petrograd, S. A. Konradi, has published only a brief account of his investigations of the Kamchatka volcanoes. After the revolution of October 1917 in Russia he proceeded to Prague, Czechoslovakia, where he now lives.

113 The following material of the writer has not yet been published: grammars on the Aleutian and Kamchadal languages, and material on the folklore, history,
128 anthropology, ethnology and sociology of the Aleut and Kamchadal. A handbook by the writer on the anthropology and ethnology of the peoples of Asiatic Russia and adjacent countries is now in print by the American Museum of Natural History in New York, and a volume on the Yakut people of Siberia (prehistory,

K /3 cont./ 4. (cont.)
101 die Altaisch. Völker /Ethnological
121 Lectures on the Altaic Peoples/, ed.
114 by A. Schiefner, St. Petersburg, 1857,
113 p. 87. The same, Versuch einer Jenissei-Ostjak und Kottischen Sprachlehre /Tentative Ket and Kot Grammar/, ed. by A. Schiefner, St. Petersburg, 1858, pp. V, VI.

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KL
121 But even for the
177 Yenisei Ostyak, standing isolated today, the present situation is not much better than for the above-mentioned Yukagir, Italmen or Kamchadal, and many other Siberian tribes. To be sure, they have managed to survive, but as a consequence of their constant and close intercourse with the Russians and living with them, their peculiar tribal character has been completely lost, and it is hardly possible now to reconstruct the original picture of these tribes with even the most meticulous research. How far and in how short a time, for example, has the disintegration processs affected even the more remote Kamchadal, isolated by the peninsular position of their country? Today we would scarcely know anything more to say about them had not Krascheninnikof /Krasheninnikov/ and Steller determined their main features. What has once been neglected here cannot be collected again later.

SS
167 At present the peoples of the Amur region, too, have entered
177 upon such a process of disintegration. Indeed, it may proceed
121 all the more rapidly among them, since the colonization of this country on the part of the Russians, as mentioned above, has been conducted with a vigor that has no equal in Siberia. The descriptions of later travelers indicate beyond doubt that the individuality of these peoples is rapidly disappearing. Even today it may often be rather difficult to find out what is original and peculiar in their practices, customs, and conceptions under what is foreign and superimposed growing over it. This difficulty did not yet exist at the time when I made their acquaintance.

Ka our attention to tracing the existence of such similarities be-
144 tween the former type and the peoples who live in those parts of Asia lying beyond our boundaries. Resembling the Kamchatka type, combinations of a broad nose with a small size of the face are encountered in South China, Indo-China, Indonesia, on the Philippines and Formosa, and partly in Japan. However, because of the absence of data collected by the same method of observation, the comparison of the Kamchatka type with the south Asiatic Mongoloids becomes an extremely difficult problem.

000 One hundred and twenty-two male Korean inhabitants of the northern provinces of Korea, studied by me with the special purpose of making this comparison, turned out to be more closely related to the Reindeer Koryak and the Chukchee than to the Lamut and the Buryat. The average rating of the incline of their nostrils is 1.71, the protrusion of nasal wings--2.09. A considerable frequency of brown shades of skin coloring (55 percent of No. 10 and darker), moderately developed cheekbones, and small facial height (131 millimeters)--all these traits make for a greater similarity of the Korean and the Kamchatka types, even though this similarity is far from being complete. Specifically, the mandible diameter of the Koreans is not large (112 millimeters), the convex shape of the nasal profile is met more [Tables 1 and 2 on pp. 10-15 and part of pages 16-17 of the original text] [16] frequently than the concave shape. (2). However, from the point of view of racial com-

2. Scientific literature contains indications of the considerable breadth of the lower jaw of the aborigines of Burma.

position the Korean type evidently contains a north Chinese element, so that it cannot be looked upon as a characteristic representative of the south Asiatic Mongoloids.

Ka The difficulties that naturally arise in the course of the at-
141 tempts to organize large-scale anthropological research in
● 121 southeastern Asia compel us to shift our attention to the
114 craniological materials, especially since scientific literature contains good descriptions of the south Asiatic series. Unfortunately our museums are completely lacking in skulls
C which could be regarded as belonging to the representatives of
[764] the Kamchatka type. The custom of burning corpses, prevail-
Ko ing among the Koryak and among some Chukchee, prevents the
[764] collecting of such skulls. Nevertheless, a specific task of

Ka 141 121 114 gathering skulls somewhere in the area of the Chaun Bay must lead to fruitful results and may be regarded as one of the next tasks of our study.

3. Finally, we should not forget that the conclusion that there exists a profound anthropological difference between the Paleo-Asiatics and the American Indians has been made on the basis of very superficial scholarly ideas about the racial peculiarities of the native population of North America. Many peoples of North America (for example, the Northern Athabascan Indians) have generally remained uninvestigated and the scientific data available with regard to other peoples are confined in most cases to a few measurements and to the most sketchy kind of description. The existing craniometric data, insofar as they lack the most essential measurements, such as those of the nasal profile and of the face as a whole, are completely inadequate. It follows, therefore, that we should undertake special projects of studying craniological collections of the American museums.

Ka 174 4. Paleoanthropology of Japan may provide important leads to the study of the possible migration routes via islands into Kamchatka. If it is true that the ancient population of Japan was of the Ainu race, the route via the Kurile Islands is excluded in the case of both the Eskimo and the Kamchatka types. (3)

3. If we shall regard the Ainu type as an original Proto-Mongoloid form--a hypothesis which, though improbable, cannot yet be discarded.

[17] However, the paleoanthropology of Japan is so poorly developed (in spite of the relative abundance of material) that the hypothesis presuming a very ancient character of the Mongoloid elements encountered on the territory of Japan, and holding that at least one of the population types which inhabit Kamchatka may have penetrated there via the Kurile Islands may not be regarded as finally disproven.

000 As a result, the organization of the exploration of paleoanthropological materials contained in the Japanese museums is also one of the next tasks of our future study.

5. In studying the problem of the continental migration route along the Okhotsk seaboard, we must define more accurately the outline of the areal [basic unit in biogeography] of the Eskimo type, which seems to skirt the northeast of Asia. With this purpose in mind, we shall in the nearest future investigate

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

cerning them. For these reasons I hope readers of every denomination will favourably receive this description of *Kamtschatka*, designed both for use and entertainment. The author, if death had not prevented him, would himself have explained the occasion that gave him an opportunity of being informed of all these particulars; and, as such an account may be expected, I shall endeavour to do it for him in as few words as possible.

In the year 1733, her Imperial Majesty *Anne* ordered an expedition on foot to examine the coast of the Northern or Frozen Ocean, likewise that to the East about *Kamtschatka*, and from thence to *America* and *Japan*; and also at the same time to make out a description of *Siberia*, and particularly of *Kamtschatka*; to observe the situation of the places, their natural history and inhabitants, and whatever else might be necessary to a full knowledge of those people. To this end three professors of the Imperial Academy of Sciences were sent along with the sea-officers. These three gentlemen divided the task amonst them; one undertook to make the astronomical and physical observations; the second to remark whatever regarded natural history; the third to draw up a description of the people and country. To these members of the academy several other proper assistants were added: these were six *Russian* students, who had an opportunity to improve themselves while

122 they were assisting the professors, and in time be qualified to fill up their vacancies. The author,
114 *Stephen Krasheninicoff*, one of the above-mentioned six, was born in *Moscow*, and had his first education in the Latin school of the convent of our Lord, where he learned the principles of rhetoric and philosophy, and excelled most of his school-fellows, both in capacity and application to his studies. Though he was principally employed in the study of natural philosophy, yet he shewed such inclination to geography and civil history, that in the Year 1735 he was employed in these different enquiries at such places as the
122 professors themselves did not visit. In the year 1736 the members of the academy, being at *Yakutski*, were informed, that the sea-officers had made but a small progress in their discoveries, and that they would not be able to reach *Kamtschatka* in several years; the professors therefore having many useful observations to make in *Siberia*, thought proper to send before them a person, on whom they could depend, to prepare for their reception at *Kamtschatka*. To this trust Mr. *Krasheninicoff* was appointed, and at the same time was furnished with proper instructions and directions. Some accidents prevented the professors from arriving at *Kamtschatka*, excepting the professor of astronomy; the others were ordered by the senate to return to St. *Petersbourg*, and in their way to make further observations in *Siberia*. Thus all enquiries

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

quires into the ſtate of *Kamtſchatka* remained to be made entirely by Mr. *Kraſheninicoff*. The profeſſors furniſhed him with ſuch aſſiſtances as they themſelves had, by order of the ſenate. He travelled from one end of *Kamtſchatka* to the other, accompanied by a guard and proper interpreters, being allowed to examine all the writings in the different forts and offices. The profeſſors alſo, in the frequent accounts received from him, found that his obſervations in natural hiſtory and phyſics were juſt; and in any difficulties aſſiſted him with their advice by letters. 122

In the mean time, the Imperial Academy of Sciences, ſenſible of the importance of purſuing their reſearches into the regions of *Siberia*, thought proper to ſend thither, in the year 1738, one of their adjuncts, *George William Steller*, who met the profeſſors the following year in their return at *Yeneſeisky*. This learned and curious gentleman had a great inclination to go to *Kamtſchatka* by water. His deſire was complied with; and the ſame inſtructions were given to him that were given to Mr. *Kraſheninicoff*. They ſent likewiſe along with him a painter, to delineate whatever might be found curious in natural hiſtory. They continued together at *Kamtſchatka* 'till the year 1740, at which time Mr. *Steller* embarked in the voyage that was made in order to diſcover the coaſt of *America*; and Mr. *Kraſheninicoff* was ſent to *Yakutski*, which as ſoon as the profeſſors were

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

122 were informed of, they ordered him to join them, and return with them to *Petersbourg* in the year 1743. Mr. *Steller*, in his return from *Siberia*, died of a fever the 12th of *November*, 1745, in the town of *Toumen*.

128 When Mr. *Krasheninicoff* had given the Academy of Sciences a full report of all his obſervations at *Kamtſchatka*, and had likewiſe received all Mr. *Steller's* papers, it was thought proper to join theſe two works, and to commit their compilement to the perſon who had the greateſt ſhare in the merit of the diſcovery. This is the origin of the following deſcription of *Kamtſchatka*; a country never yet deſcribed by any author of credit, and where the manners and cuſtoms of the inhabitants are beyond meaſure ſingular and
114 uncommon. It is to be wiſhed that ſuch writers as have hitherto given us accounts of new-diſcovered countries had taken the ſame pains to inform themſelves that this writer hath. The author was advanced in the year 1745 to be an adjunct of the Academy of Sciences, and in the year 1750 was made profeſſor of botany and natural hiſtory. He died in the 42d year of his age, when the laſt ſheets of his book were printing off; and was one of thoſe few whom perſonal merit alone, and no advantages of birth or fortune, contributed to raiſe.

102 For the better underſtanding of the geographical
128 deſcriptions, it was thought proper to add two maps of

22: Guillemard T-2 (1882) 1886 Kamchadal

PREFACE.

122 A FEW words are perhaps necessary by way of introduction to the following pages.

The *Marchesa*, an auxiliary screw schooner yacht of 420 tons, Mr. C. T. Kettlewell captain and owner, was commissioned in the Clyde in November, 1881, and left Cowes on the 8th of January following. She reached Colombo April 24th, having touched at Socotra and Oolegaum Island, one of the Maldive group, on her way from Aden. From Ceylon she proceeded *viâ* Singapore to Formosa and the Lin-kin Islands, and thence to Japan. She left Yokohama for Kamschatka July 29th, returning thither from the north on the 6th of October. On the second visit to Japan four months were spent in the country, and the yacht then proceeded for a six weeks' cruise in Chinese waters. Leaving Hongkong at the end of March, 1883, some weeks were devoted to exploring the little-known islands of the Sulu Archipelago, and to visiting the territory of the North Borneo Company. The *Marchesa* then returned to Singapore to take in stores, and proceeded *viâ* Sumbawa, Celebes, and various other islands of the Malay Archipelago to New Guinea. In her homeward voyage she again visited the Straits Settlements and Ceylon, and calling at Bombay, finally reached Southampton April 14th, 1884.

000 To such countries as Ceylon and Japan, and others which lie in the beaten path of the tourist round the world, I have not thought it necessary to allude, confining myself entirely to an

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

122 produce dinners under the most trying circumstances which would not have disgraced the table of an alderman. European servants are, in rough travel, by no means always an unmixed good, and it is pleasant therefore to have to record an instance to the contrary. Nor were we much less fortunate in our two guides. Both were old sable-hunters and good backwoodsmen. Jacof Ivanovitch was a solemn, but good-humoured Siberian Russian, who knew the country well; and Afanasi Waren, in whom there was more than a suspicion of English blood, spoke our language very fairly. The latter was a jovial soul with a merry eye, and if report ran true, a great lady-killer. Under the sobriquet of "Half-nasty" he afterwards became an equally great favourite with our crew. Our complement was made up with three half-breed natives, in charge of the packhorses, in whose favour there is but little to say. Of the misdeeds of one of them, whom, from his partiality for the liquor of the country, we afterwards nicknamed Vodki, I shall have more to say in the sequel. Lazy, untruthful, and apt brutally to ill-treat their horses whenever we were not at hand to interfere, they caused the only trouble we had during the first part of our journey. The inhabitants of the river settlements that we were destined to meet with later were, however, as will be seen, far worse; and in comparison with them, our horseboys came afterwards to be regarded in a far more favourable light than they really deserved.

AFANASI WAREN.

492 The pack-saddles used throughout the country are of an excellent pattern, and owing to the hooks with which they are provided, the necessity for the many lashings which are so in-

CHAPTER V.

000 KAMSCHATKA—(*continued*).

We begin our journey—Stampede of the packhorses—The effects of vodki—Stari-ostrog—Salmon *à discretion*—Large birches—More stampedes—The fur-trade—Prices of skins—On the *tundras*—Narchiki—Enormous abundance of salmon—Mortality among the fish—A Kamschatkan interior—*Ovis nivicole*—Hot springs—Uses of the birch-tree—Kamschatkan ponies—Gunal—Balagans—Sledge-dogs—An Indian summer.

122 EARLY on the morning of August 19th we rowed ashore with a somewhat formidable amount of baggage, and found the horses awaiting us. Of these there were sixteen; and four little foals, engaged in capering round their mothers, were, we learnt, also to join the expedition. This number, owing to our numerous *personnel*, was hardly sufficient, but as we had requisitioned almost all the available cattle in the neighbourhood of Petropaulovsky, we decided to make a start with them, trusting to be able to pick up others at the little village of Avatcha, about twelve versts distant.[1] Our party were ten in number, our three selves with two servants forming the yacht contingent. These latter were old campaigners. Louis, who had served in the Franco-Prussian War, and had been in the army before Paris in the terrible winter of 1870-71, had done much travelling in his master's service and elsewhere, and was without exception the very best servant I ever saw. Spiridione Zembi, a Maltese Greek, our cook, deserves no less praise. Master alike of his profession and of many languages, he contrived to

[1] A verst is two-thirds of an English mile.

"Four Years Ago the Library [CMC: i.e., the New York Public Library] acquired the Aleutian manuscript texts recorded by the late Waldemar Jochelson when he headed the ethnological section of the scientific expedition sent by the Russian Geographical Society to the Aleutian Island and Kamchatka. With the assistants Jochelson reached the peninsula in the summer of 1910 and spent the following winter studying the language and culture of the aborigines, the Kamchadals, or, as they call themselves, Itelmens (='men'). He recorded a number of texts in Kamchadal and wrote several papers on the Kamchatka and its natives, which have remained largely unpublished. Last year all these manuscripts came into the possession of the Library.

Texts in Kamchadal

The studies, 129 typewritten pages in all, are couched in rather bad English. They include some notes on the geography and history of the region, but have to do chiefly with the Kamchadals, their social institutions, folklore and shamanism, as well as the various elements of their material culture, such as occupations, crafts, dwellings, food, clothes, harness, tools, weapons, armor. There are also some observations on Kamchadal diseases and folk medicine. The papers are somewhat disjointed and repetitious and give the impression of preliminary notes for a monograph. They are supplemented by some fifty photographs, presumably taken

during the expedition of 1910-11 and intended to illustrate the work that Jochelson had in preparation. They depict aborigines: men, women and children, separately and in groups, as well as landscapes, village streets, homes, dogs, products of native crafts. Three of these photographs are reproduced herewith.

Jochelson's studies include some linguistic material: a few observations on the Russian dialect spoken by the natives, a list of Itelmen terms of kinship, paradigms of Itelmen nouns, pronouns and verbs, and a sketch of the phonology of the language."

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i. e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya, s. v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenan anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

18: Yarmolinsky--4 L-4 (no date) 1947 Kamchadal-1-2
116, 114, 126

"This circumstance lends particular interest to the Itelmen texts which are part of the newly acquired manuscript collection. There are in all forty-one of them. With the exception of one item - a brief account of a trip from one village to another by a native, apparently an informant of Jochelson's, they are in the nature of folk tales. The texts, in the original Kamchadal, all typewritten, are provided with an interlinear literal translation, in Jochelson's hand, and with a free rendering, both in an English of sorts. The free translation is often abridged. The editing of the texts must have been carried out by the Russian ethnographer in this country, where he settled in 1922. (1)

1. A group of Kamchadal tales was recorded about 1900 by another Russian ethnographer, Waldemar Bogoras, while he was doing field work in North-Eastern Siberia as a member of the Jesup North Pacific Expedition. He placed these texts at the disposal of Jochelson, who published a free English rendering of nine of them in his monumental monograph on the Koryaks (American Museum of Natural History. Memoirs, v.10, Leiden-New York, 1908, p. 327-340). The whereabouts of the original texts is unknown. Some of these tales are variants of the stories recorded by Jochelson. The text of one Kamchadal tale, with a word-for-word Russian translation is appended to S.N. Stebnitzki's Itelmen grammar [CMC: Itel'menskiĭ yazyk. (Institut

narodov Severa, Leningrad. Nauchno-issledovatel'skaya assotziatziya. Trudy po lingvistike. Moskva, 1934. 4°. t. 3, p. 85-104)]

Below [CMC: see category 539] are given versions of three of the more attractive folk tales. The translation is based on Jochelson's word-for-word rendering. This occasionally fails to convey a satisfactory meaning, and the present writer, while seeking to adhere to the original as closely as possible, felt justified in deviating from Jochelson's interpretations."

122 were informed of, they ordered him to join them, and return with them to *Petersbourg* in the year 1743. Mr. *Steller*, in his return from *Siberia*, died of a fever the 12th of *November*, 1745, in the town of *Toumen*.

128 When Mr. *Krasheninicoff* had given the Academy of Sciences a full report of all his obſervations at *Kamtſchatka*, and had likewiſe received all Mr. *Steller*'s papers, it was thought proper to join theſe two works, and to commit their compilement to the perſon who had the greateſt ſhare in the merit of the diſcovery. This is the origin of the following deſcription of *Kamtſchatka*; a country never yet deſcribed by any author of credit, and where the manners and cuſtoms of the inhabitants are beyond meaſure ſingular and
114 uncommon. It is to be wiſhed that ſuch writers as have hitherto given us accounts of new-diſcovered countries had taken the ſame pains to inform themſelves that this writer hath. The author was advanced in the year 1745 to be an adjunct of the Academy of Sciences, and in the year 1750 was made profeſſor of botany and natural hiſtory. He died in the 42d year of his age, when the laſt ſheets of his book were printing off; and was one of thoſe few whom perſonal merit alone, and no advantages of birth or fortune, contributed to raiſe.

102 For the better underſtanding of the geographical
128 deſcriptions, it was thought proper to add two maps of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

of *Kamtſchatka* and the neighbouring countries, between which and other maps of thoſe countries, even ſuch as the academy itſelf hath formerly publiſhed, the curious reader may obſerve a great difference. But the author aſſerts that every thing is laid down from the ſtricteſt inquiry, and had purpoſed to ſupport the authenticity of his maps, by publiſhing ſuch memoirs as would prove their accuracy beyond diſpute.

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A GENERAL

5: Jochelson A-5 (1910-11) 1928 Kamchadal

PREFACE

121 In 1925 the Carnegie Institution of Washington published my report, *Archæological Investigations in the Aleutian Islands*. The present work deals with the archæological investigations in Kamchatka, based on fieldwork conducted by the author in 1910–1911 at the expense of the late F. P. Riabouchinsky, Moscow banker, and under the auspices of the Imperial Russian Geographical Society. Both works form a part of the results of the author's studies as a leader of the Ethnological Division of the so-called Kamchatka Expedition, and may be regarded as publications, in English, of the Russian expedition. The reasons for the study of the Aleutian Islands by the Ethnological Division of the Kamchatka Expedition are given in my work *Archæological Investigations in the Aleutian Islands* (page 2).

113 The leaders and members of the other divisions of the expedition, who worked in Kamchatka only, are still working out their material. The following publications have appeared in Russian. Professor P. J. Schmidt, member of the Russian Academy of Sciences and leader of the Zoological Division, published the first volume of *The Zoology of Kamchatka*, Moscow, 1916 (1–432 pages, 4°). Professor V. L. Komarov, member of the Russian Academy of Sciences and leader of the Botanical Division, published the first volume of *The Vegetation of Kamchatka*, Moscow, 1912 (1–458 pages, 4°). Dr. V. A. Vlasov, the chief of the Meteorological Bureau of Moscow and leader of the Meteorological Division, published Volume I, Part 1, *The Climate of Kamchatka;* Part 2, *Kamchatka's Waters*, Moscow, 1916 (I–VII, 1–370 pages, 4°).

The above Russian publications of the Kamchatka Expedition were not written by the division leaders alone, but there are also contributions by their assistants, fifteen in number, specialists in different branches of zoology, botany, geology and meteorology.

The leader of the Geological Division, the mining engineer and member of the Geological Survey of Petrograd, S. A. Konradi, has published only a brief account of his investigations of the Kamchatka volcanoes. After the revolution of October 1917 in Russia he proceeded to Prague, Czechoslovakia, where he now lives.

113 The following material of the writer has not yet been published: grammars on
● 128 the Aleutian and Kamchadal languages, and material on the folklore, history, anthropology, ethnology and sociology of the Aleut and Kamchadal. A handbook by the writer on the anthropology and ethnology of the peoples of Asiatic Russia and adjacent countries is now in print by the American Museum of Natural History in New York, and a volume on the Yakut people of Siberia (prehistory,

5: Jochelson A-5 (1910-11) 1928 Kamchadal

113 history, anthropology, language, folklore, ethnology and sociology) is now in pre-
128 paration for the publications of the American Museum.

The specimens described in this book are on exhibition in the Central Museum for Ethnography (former Count Rumiantzev's Museum) in Moscow.

128 Acknowledgment is made to Professor B. M. Sokolov, the Director of the Central Museum for Ethnography in Moscow, and his assistant, Dr. B. S. Shukov, who supervised the work of illustrations; to the mineralogist, Professor A. G. Titov of the Moscow University, who determined the stone material for implements and weapons; to the scientific collaborator of the Central Museum, Madame E. I. Goryunova, and the artist, Mr. Gutentag, who made drawings from specimens of the Kamchatka collection; to the photographer of the Central Museum, Mr. P. N. Bashirov, for the photographs taken of specimens in the Central Museum.

Mr. N. N. Krijanovsky of the staff of the American Geographical Society in New York made drawings of the map showing the distribution of the palæolithic, neolithic, bronze and iron stations in Northern Asia and the map of Kamchatka Peninsula.

Mrs. Jochelson, as a member of the Ethnological Division of the Kamchatka Expedition, assisted me in excavating ancient Kamchadal village sites and in taking photographs during our fieldwork. As a Doctor of Medicine she made herself useful by treating the numerous Kamchadal patients.

Finally the author is under obligation to the American Museum of Natural History in New York for assistance in clerical work and for putting at his disposal office room while writing this report.

WALDEMAR JOCHELSON.

American Museum of Natural History,
New York, March 27, 1928.

113, 13

Kamchadal RY3

/For data on the physical geography, geology, climate, flora, fauna and soil of Kamchatka, see 58: Berg, Rl Soviet Union, cat. 116, pp. 335-344. --Analyst/

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 respects they are not distinguishable from the indigenes, but by their features and idiom.

161/361 With respect to the Kamtschadale village, which forms a considerable part of the place, and is situated, as I have already said, upon the narrow projection of land which closes in the entrance of the port, it is at present composed of from thirty to forty habitations, including winter and summer ones, called *isbas* and *balagans*; and the number of inhabitants, taking in the garrison, does not exceed a hundred, men, women and children. The intention is to increase them to upwards of four hundred.

13 To these details respecting the port of St. Peter and St. Paul, and its destined improvements, I shall add a few remarks upon the nature of the soil, the climate, and the rivers.

7:Lesseps T-3 (1787-88)1790 Kamchadal

13 rivers. The banks of the bay of Avatſcha are rendered difficult of acceſs by high mountains, of which ſome are covered with wood, and others have volcanos*. The valleys preſent a vegetation that aſtoniſhed me. The graſs was nearly of the height of a man; and the rural flowers, ſuch as the wild roſes and others that are interſperſed with them, diffuſe far and wide a moſt grateful ſmell.

The rains are in general heavy during ſpring and autumn, and blaſts of wind are frequent in autumn and winter. The latter is ſometimes rainy; but notwithſtanding its length, they aſſured me that its ſeverity is not very extreme, at leaſt in this

* There is a volcano about fifteen or twenty werſts from the port, which the naturaliſts who accompanied count de la Perouſe viſited, and which will be mentioned in his voyage. The inhabitants informed me that ſmoak often iſſued from it, but that an eruption, which uſed to be frequent, had not happened for many years.

ſouthern

7:Lesseps T-3 (1787-88)1790 Kamchadal

13 ſouthern part of Kamtſchatka*. The ſnow begins to appear on the ground in October, and the thaw does not take place till April or May; but even in July it is ſeen to fall upon the ſummit of high mountains, and particularly volcanos. The ſummer is tolerably fine; the ſtrongeſt heats ſcarcely laſt beyond the ſolſtice. Thunder is ſeldom heard, and is never productive of injury.

* The exceſſive cold of which the Engliſh complain, may not be without example; and I pretend not to contradict them. But as a proof that the rigour of the climate is not ſo very piercing, the inhabitants, whom they repreſent as not daring to come out of their ſubterraneous dwellings, or *yourts*, during the whole winter, for fear of being frozen, no longer conſtruct any of theſe caves in this ſouthern part of the peninſula, as I ſhall have occaſion to obſerve elſewhere. I acknowledge, however, that the cold which I experienced during my abode there, and which may be compared to that of the winter of 1779, appeared to me very ſimilar to what is felt at Saint Peterſburg. What the Engliſh muſt have had reaſon to ſuppoſe extraordinary, are the dreadful hurricanes, which bring on ſuch thick and heavy ſtorms of ſnow, that it is not poſſible either to venture out, or to advance, if we are on a journey. I experienced this more than once, as will be ſeen in the ſequel.

7:Lesseps T-3 (1787-88)1790 Kamchadal

13 Such is the temperature of almoſt all this part of the peninſula.

Two rivers pour their waters into the bay of Avatſcha; that from which the bay is named, and the Paratounka. They both abound with fiſh, and every ſpecies of water fowl, but theſe are ſo wild, that it is not poſſible to approach within fifty yards of them. The navigation of theſe rivers is impracticable after the 26 November, becauſe they are always frozen at this time; and in the depth of winter the bay itſelf is covered with ſheets of ice, which are kept there by the wind blowing from the ſea; but they are completely diſpelled as ſoon as it blows from the land. The port of St. Peter and St. Paul is commonly ſhut up by the ice in the month of January.

I ſhould doubtleſs ſay ſomething in this place of the manners and cuſtoms of the Kamt-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

A GEOGRAPHICAL DESCRIPTION OF

KAMTSCHATKA.

AND OF THE

COASTS and ISLANDS adjacent to it.

131

PART I.

CHAP. I.

Of KAMTSCHATKA.

THOUGH the country called *Kamtſchatka* was long known to the geographers of former times, yet ſo little were they acquainted with its ſituation, that they believed it to be joined to *Yeſſo*; and this opinion was looked upon in thoſe days as a very probable conjecture: but it has been ſince found that between the two countries there is a large ſea, interſperſed with many iſlands. The

131 *Russians* could form their maps of *Kamtschatka* only from conjecture 'till it was brought under their subjection; and then they could not immediately procure any accurate or satisfactory knowledge of the country, for want of persons properly qualified to make the necessary enquiries.

The two late expeditions have greatly contributed to complete the geography of these parts; particularly the last, in which the sea-officers delineated exactly all the eastern coast of *Kamtschatka* as far as the cape of *Tchukotskoi*, all the western to the *Penschinska* gulph, and from *Ochotskoy* to the river *Amur*: they described the islands lying between *Japan* and *Kamtschatka*, and also those which are between *Kamtschatka* and *America*. At the same time the gentlemen of the Academy undertook to determine the situation of *Kamtschatka* by astronomical observations, and to remark every thing worthy of notice in the civil and natural history of the country and places adjacent. In this chapter I shall only treat of the geography of this country.

That great peninsula, which makes the boundary of *Asia* to the north-east, and stretches itself from north to south about 7° 30′, is called *Kamtschatka*. I place the beginning of this peninsula at the rivers *Pustaia*, and *Anapho*, lying in the latitude of 59° 30′. The first runs into the *Penschinska* sea, and the other to the eastward. At these places the isthmus is so narrow, that I am credibly informed the sea may in fair weather be seen on both sides from the hills in the middle. As the country runs broader towards the north, I reckon this place the isthmus that joins the peninsula to the main land. The government of *Kamtschatka* extends no farther than to this place; and all the country north of this boundary is called *Zenosse*, and is under the government of *Anadir*.

The southern part of this peninsula, which is called *Lopatka*, lies in 51° 3′ north latitude. The difference of longitude from *Petersbourg* is by the best observations found to be at *Ochotskoy* 112° 53′

112° 53′ eaſt longitude, and thence to *Bolſcheretſkoi* or the Great River 14° 6′ eaſt. The figure of the peninſula of *Kamtſchatka* is ſomewhat elliptical, being broader towards the middle, and growing narrower towards both ends. Its broadeſt place is between the mouth of the river *Tegbil* and the river *Kamtſchatka*. Towards the ſource they are joined by the river *Elouki*. 131

The *Elouki* runs in the ſame latitude with thoſe rivers for 415 verſts. They call the ſea which ſeparates *Kamtſchatka* from *America* the Eaſtern Ocean. On the weſtern ſide lies the *Penſchinſka* ſea, which begins near the ſouthern point of the cape of *Kamtſchatka* and the *Kurilſki* iſlands, and runs northward between the weſtern coaſt of *Kamtſchatka* and the coaſt of *Ochotſkoy* more than 1000 verſts. The northern part is called the bay of *Penſchinſka* from the river *Penſchina* which falls into it. The hills make one continued ridge from north to ſouth through the peninſula, almoſt equally dividing the country. From this ridge ſeveral others extend towards the ſea, between which are the courſes of the rivers. Theſe ridges ſometimes run a conſiderable way into the ſea, and are called Noſs, or capes. There are more of theſe upon the eaſtern than the weſtern coaſt. All the bays between the capes are called, in general, ſeas; each having its particular name, as the *Olutorſky* ſea, *Kamtſchatka* ſea, *&c.* We ſhall hereafter give our reaſons for calling the whole peninſula by the name of *Kamtſchatka*, though in fact it hath in none of the different languages of the inhabitants any general appellation; but every part of the country receives its name from its inhabitants, or ſomething remarkable obſerved in it: and even the *Ruſſian* Coſſacks underſtand *Kamtſchatka* to be only the country lying near the river of that name; and to the other parts of this peninſula they have given the following appellations: 133 103

Kurilſki Country is the ſouthern part, ſo named from the *Kuriles* that inhabit it.

491 *Bolſcheretskoi* fort to the *Kurilskaya Lopatka* is 210 verſts 300
487 fathoms, which ſpace may be eaſily travelled, even in four days; but the Coſſacks of thoſe places have a cuſtom of ſtopping at any ſmall fort, under pretence of ſome buſineſs there, though their moſt probable motive is to refreſh their dogs. At a middling rate I have travelled in three days from the *Kamtſchatkoi* to the *Bolſcheretskoi*, which is near 150 verſts.

	verſts	fathoms
From the *Bolſcheretskoi* fort to the mouth of the Great River — — —	33	0
From the mouth, along the ſea-ſhore, to the river *Opala* — —	85	0
From thence to the *Koſhubochiek* —	18	0
From thence to the *Yavina* —	15	0
From thence to the river *Ozernaya* —	15	0
From thence to the *Kambalina* —	36	300
From thence to the *Lopatka* —	27	0
In all from the *Bolſcheretskoi* to the *Kurilskaya Lopatka* — —	210	300

CHAP. III.

Of the KURILSKI ISLANDS.

109 131 UNDER the name of *Kurilski* iſlands are underſtood all thoſe iſlands which extend from the *Kurilskaya Lopatka*, or the ſouthern end of *Kamtſchatka*, in a row ſouth-weſt quite to *Japan*. They derive their names from the inhabitants of thoſe iſlands which lie neareſt to *Kamtſchatka*, who are called by

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact
131 number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*,
136 and extends in length from the north-eaſt to the ſouth-weſt
161 50 verſts, and in breadth about 30. This iſland is full of
651 mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnoye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and salteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer

24: Lansdell--634-635 M-2 (1879) 1882 ~~Kamchadal-I-3~~
116, 131, 133

"The traveller who, from Okhotsk, wishes to visit Kamchatka may reach Petropavlovsk by sea through the Kuriles, or continue round the coast by road. The latter course takes him through Yamsk to Ghijiga, at the north of the bay, a distance of 1,100 miles. He then descends along the western coast of Kamchatka to Tigil, 760 miles further, at which point he strikes inland to a valley lying below active volcanoes, and so reaches Petropavlovsk, on the shore of the North Pacific, a land journey from Okhotsk of 2,540 miles, accomplished by deer, horses, and dogs.

Kamchatka is so called after the name of its principal river. The peninsula is 800 miles long, and from 30 to 120 miles wide; its total area being about 80,000 square miles, or five times the size of Switzerland. The southern extremity, called Cape Lopatka, is a low, narrow tongue of land, which, as it proceeds northwards, widens and rises into rocky and barren hills, with small valleys timbered with willow and stunted birch. Two degrees north the range divides, one portion running nearly due north and the other taking a north-easterly direction. In the fork formed by these two chains lies the valley of the river Kamchatka. The western chain rarely rises above 3,000 feet, but the eastern chain has many high volcanoes, among them Kluchevsky, which is somewhat higher than Mont Blanc, and not far from the sea. (1) [635]

1. Many ranges of terraces and secondary summits surround the mountain

as with an enormous pedestal, so that its base has a circumference of not less than 200 miles. The fissured summit constantly smokes, and twice or thrice a year throws out cinders. Ashes and dust have sometimes been carried to a distance of 180 miles, and covered the ground many inches deep, preventing the Kamchatdales from sledging. An eruption in 1737 ejected much lava, and this, dissolving the glaciers, poured into the neighbouring valleys a deluge of waters. In 1854 an other stream of fire descended from Mount Kluchevsky. From the crater of the Avasha, immediately behind Petropavlovsk, have been thrown at the same time stones, lava, and water. The following are some of the active volcanoes: Korakovsky, 11,200 feet; Chevelutch, 10,529; Jupanof, 8,478; Avatcha, 8,344; and the Great Tolbach, 7,618; Whilst, of the extinct volcanoes, Uchkin is the highest, with an elevation of 10,977 feet.

Earthquakes are more frequent, perhaps, in Kamchatka than in any other country. The number of shocks felt at Petropavlovsk averages eight annually. (1)

1. Mr. Hill describes one lasting no less than eight minutes. During the whole of this time rumbling and loud noises were heard beneath the ground,

24: Lansdell -634-635 M-2 (1879) 1882 Kamchadal-3
116, 131, 133

and the earth trmbled violently. Some of those who experienced it said they thought at one moment that the earth was sinking beneath them, and the sea about to rush in upon the land, and the next that they were rising upon the crust of the crater of a volcano in terrible eruption beneath the ground."

1: Kolarz J-4 (no date) 1954 RR1 Siberia
Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

K 175 131 167 A 175

/127 cont./ the next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

A K 174 103 192

2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101]

Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

134 241 ſeveral years paſt ſown ſeven or eight poods † of barley, which yielded a crop not only ſufficient for groats and meal for their own uſe, but even enough to ſupply their neighbours, though they are obliged to plough their land with men.

All garden ſtuff thrives not alike; the moſt ſucculent produce only leaves and ſtalks. Cabbage and lettice never grow to any head, and the peas continue in flower until late in the harveſt without yielding ſo much as pods; but garden roots which are full of juice, ſuch as turnips and radiſhes, grow very well. Theſe tryals, however, were only made upon the banks of the Great River and *Awatſcha.* Such things as require a hot ſoil, grow very well every where, but ſtill beſt upon the *Kamtſchatka.* Upon the Great River I never ſaw any turnips larger than three or four inches diameter; but upon the *Kamtſchatka,* I have ſeen them four or five times as big.

137 The graſs grows here ſo high, and is ſo full of ſap that one ſcarcely ſees any thing like it in all the empire of *Ruſſia*; near the river and lakes, and in the opening of the woods, it riſes to above the height of a man, and ſo faſt that it may ſometimes be mowed thrice in a ſummer; ſo that few places can be more proper for breeding of cattle; and although the blades are thick and high, and make but a coarſe ſort of hay, yet the cattle are large and fat, and give plenty of milk both ſummer and winter, which I attributed to the richneſs of the ſoil and the ſpring rains. The graſs continues full of juice, even to the beginning of winter, which being condenſed by the cold prevents the graſs from turning hard during that ſeaſon. As the graſs is ſo high and thick, a great deal of hay may be made upon a ſmall ſpot; and the cattle can find food in the fields all the winter. The places where 132 the graſs thus grows are never ſo much covered with ſnow as the bogs and ſwamps, and for this reaſon it is difficult to travel over them in the winter.

† A pood is a *Ruſſian* weight of 40 lb.

In

In other places lying upon the Eaſtern Ocean, either to the N. or S. of *Kamtſchatka*, there is no land fit for culture; for all that is near the ſhore is either ſandy, ſtony, or boggy, and the banks are ſo narrow, that if the ground was good, yet there is not enough for agriculture; and there are but very little hopes of the land about the *Penſchinſka* ſea anſwering better, eſpecially for winter-corn, it being all marſhy and boggy. At ſome diſtance from the ſea are found woody places which are dry and high, and appear not improper for corn; but the ſnow which falls in the beginning of the harveſt before the earth is frozen, and lies generally deep upon theſe places 'till the middle of *May*, both prevents the ſowing of the ſummer-corn, and deſtroys the winter-corn; and, becauſe at the thawing of the earth the corn would be blaſted by the evening froſts, it is impoſſible to ſow any before the middle of *June*; after which time to *Auguſt* are continual rains, ſo that ſometimes the ſun is not ſeen for fourteen days together: this would cauſe the corn to grow very high and full of juice; but, for want of warm and dry weather, it would never ripen. Notwithſtanding, Mr. *Steller* thinks, that if the ground was properly prepared, oats and barley might ripen there; but this is much to be doubted, until, at leaſt, further tryal can be made; for I have myſelf ſeveral times ſown barley upon the Great River, and it grew well in thickneſs, height, and ſtrength of blade 'till the beginning of *Auguſt*, when, juſt as the ear was putting forth, all of it was deſtroyed by the froſt.

All theſe barren places, not only near the *Penſchinſka* ſea, but even within the land, appear to be compoſed of earth brought from other parts. This one may diſcover by the different ſtrata, and perceive how they have encreaſed yearly on the banks of the rivers, which are high, and on the cliffs that are bare. I have ſeen hanging out of the earth, trees which are not to be found in that country, more than ſeven feet deep under the ſurface. Hence it may be concluded, that all theſe barren, boggy places, where at

this they bring down with great difficulty, using the method above mentioned: for which reason a very poor house will cost here 100 rubles and more, and a small fishing-boat five rubles. In other places, where the hills are nearer the shore, and the water-carriage easier, wood for firing and building is much cheaper. 137 313

Upon the *Bistroy* river, which falls into the Great River below the *Bolscheretskoi Ostrog*, grows the best wood that is in these parts; even the birch-trees are so large, that captain *Spanberg* built a sloop with their wood, in which he made several distant voyages to sea. 137

It is very remarkable, that when this vessel was launched she lay as deep in the water as a vessel full loaded; and it was believed, that she never would be fit to go to sea, but that the smallest loading would sink her. But, when she was laden, she drew very little more water, and few vessels sailed better or lighter, or could go nearer the wind: the reason of which may be, that as this wood has not so much rosin, it sucked a greater quantity of water at first, but so soon as its parts were once filled, it then sucked very little more.

There is great plenty of wood upon the eastern coast of *Kamtschatka*; from the hills down to the very shore grow very fine birch and alder trees. Beyond the river *Jonpanoba*, and towards its head, begin the woods which continue to the *Kamtschatka*, *Lopatka*, and along the river *Kamtschatka* to the mouth of the river *Elouki*. Up the river, almost to its head, grow likewise pines, but not large enough for buildings. About the neck of land which joins the peninsula of *Kamtschatka* to the continent, the wood begins again to fail.

The changes of the weather and air are commonly in the following order: harvest and winter make up more than one half of the year; and the spring and summer cannot be reckoned above 132

132 above four months: the trees commonly begin to bud about the end of *June*, and ſome of them to loſe their leaves in the month of *Auguſt*.

The winter is moderate and conſtant, ſo that there are neither ſuch ſevere froſts nor ſudden thaws as in *Jakutſki*. The mercury in *de l' Iſle*'s thermometer was between 160 and 180 degrees. From the ſevere froſts that we had two years following in the month of *January*, it fell to 205 degrees. The month of *January* is always their coldeſt month; and at that time the mercury was between 171 and 200 degrees.

The ſpring weather is pleaſanter than the ſummer; when, although it ſometimes rains, yet now and then there are fine clear days. The ſnow lies to the end of *May*, which with us is reckoned the laſt ſpring month.

The ſummer is for the moſt part very diſagreeable weather, rainy and cold *; the reaſon of which is the continual damps from the neighbouring mountains being covered with ſnow that never melts. It frequently happens, that for a week or two the ſun does not appear: and during all the time that I was there we had never one whole week of fair weather, never one day ſo clear but the mornings were foggy; and there fell, as it were, a ſmall drizzling rain, which continued 'till twelve o'clock. From this moiſt air and the neighbouring hills it is ſo cold, that one can never be without warm cloathing.

I never obſerved either violent rains or loud thunder; for the rains are ſmall, and the thunder reſembles ſome rumbling noiſe under the earth. The lightning is alſo very weak.

In the *Oſtrog* upon the Great River, where the air is warmer, the mercury in the thermometer changed from 130 to 146 degrees; and by an extraordinary heat, that happened two different years in the month of *July*, it roſe 118 degrees.

* This is to be underſtood of the country about the Great River and the *Penſchinſka* ſea; in other places the ſummer is tolerable, as will be mentioned hereafter.

The

The inconſtancy of the ſummer weather not only occaſions the unfruitfulneſs of the land, but is likewiſe a great hindrance to the people in preparing their fiſh againſt the winter; ſo that, although there is vaſt plenty of fiſh, they are not able to prepare ſo much as to prevent a ſcarcity before the winter is over; nor can they preſerve one fiſh out of ten which they hang up to dry, the continual wet breeding worms which conſume it; ſo that the fiſh which the dogs and bears catch themſelves and lay up, ſells very dear in the ſpring. 132 251

In the more diſtant places from the ſea, and eſpecially about the upper *Kamtſchatka Oſtrog*, the weather is very different; it being fine and clear from the month of *April* to the middle of *June*. The rains begin after the ſummer ſolſtice, and continue to the end of *Auguſt*. Deep ſnows fall in the winter; but high winds ſeldom happen, and, when they do, are but of ſhort continuance: and although there does not, perhaps, fall more ſnow than upon the Great River, yet it is deeper, as it lies lighter. 132

The harveſt weather is generally agreeable and clear, except at the end of *September*, when ſtorms frequently happen. The rivers are generally frozen over in the beginning of *November*; for their ſwift current prevents their freezing in moderate froſts. Upon the *Penſchinſka* ſea the winds are generally in the ſpring ſouth-ſouth-eaſt and ſouth-weſt; in the ſummer, weſt; in the autumn, north and north-eaſt; in the winter before the ſolſtice, uncertain; but after that, to the month of *March*, the north-eaſt and eaſt winds prevail. From theſe winds the ſpring and ſummer, before the ſolſtice, are generally thick and heavy; but the weather in the months of *September*, *October*, *February*, and *March*, is more agreeable, and is the time for trade and long journies. In *November*, *December*, and *January*, there is little clear good weather, but heavy ſnows and great drifts, which in *Siberia* they call *Pourgami*. The eaſt and ſouth-eaſt winds blow long and moſt violently, ſometimes for two days together, and with ſuch vehemence, that

132 that a man cannot ſtand upon his feet. Theſe winds, which
136 generally rage the three laſt-mentioned months, bring a great quantity of ice upon the ſhore of the *Lopatka* and *Awachinſkaya* bay, with a multitude of ſea-beavers: about this time, therefore,
132 is their beſt ſeaſon for catching theſe animals. The north winds, either in ſummer or winter, bring agreeable clear weather; but the ſouth and ſouth-weſt winds in ſummer are attended with rain, and in winter with ſnow. And although the cold is not ſo great, yet the air is always heavy and thick, and at ſea generally attended with great fogs, as our people, who went upon the *American* and *Japan* expedition, experienced: therefore ſailing in ſuch weather is as dangerous as living upon the land is diſagreeable; and this agreement of the weather of *Kamtſchatka* with what is found far out at ſea is to be attributed not only to neighbouring countries, but likewiſe to the great and extenſive Southern Ocean. Hence the northern parts of *Kamtſchatka*, that are ſheltered from the ſouth wind, are both more fertile and enjoy a better climate; and the nearer one comes to the *Lopatka* the moiſter and thicker is the air in ſummer, and the winds more violent and of longer duration in winter. It frequently happens, that about the Great River the weather is very calm and agreeable, while at the *Lopatka* the inhabitants cannot ſtir out of their huts; becauſe it is a narrow point of land, and expoſed to every wind, except in the bay. All along the *Penſchinſka* ſea, the more northernly any place lies, the leſs rain have they in ſummer and wind in winter. The winds and weather about the mouth of the *Kamtſchatka* river, and near to the upper *Oſtrog*, are very changeable. From the eaſt and ſouth-eaſt they have as violent ſtorms as about the *Penſchinſka* ſea; but yet, compared with this, the weather is more frequently fair than rainy. The difference between the eaſtern and weſtern parts of *Kamtſchatka* is plainly to be ſeen in travelling from the head of the *Biſtroy* river: for towards the *Penſchinſka* ſea the air appears always thick and hazy,

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 105

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

000 hours' time. It was the white of an egg, with ſome camphire and ſugar, which he rubbed 'till it foamed upon a pewter plate, then tied it in a handkerchief, and bound it upon the forehead. This he found to ſucceed in every inflammation of the eyes.

132 It hails frequently both in ſummer and harveſt; but I never ſaw the hail bigger than peaſe. It ſeldom lightens but at the ſummer ſolſtice. The thunder is alſo but ſeldom heard, and then ſeems to be at a great diſtance. We have no inſtance of any one killed by thunder: the natives ſay, indeed, that before the arrival of the *Ruſſians* they had a great thunder, and ſome were killed by it; but this is to be queſtioned, ſince for ſo long a time we have had no inſtances of it. As to fogs, it is impoſſible that there ſhould be greater any where than at *Kamtſchatka*; and it is to be queſtioned whether deeper ſnows fall any where between 55 and 52 degrees north latitude than here, from the melting of which the rivers ſwell ſo much as to overflow their banks, and the earth in the ſpring is entirely covered with water. The cold in winter is moſt intenſe about the Great River and the *Awatſcha*; but in the lower *Kamtſchatkoi Oſtrog* it is much warmer than in any other place of *Siberia* in the ſame latitude.

The greateſt inconveniency ariſes from the violent winds and ſtorms, concerning which the following remarks may not be improper. Before a great wind, which generally comes from the eaſt, the air is always thick and dark; but, as I had not a thermometer, I cannot be certain if it is warmer then than at other times. The eaſt winds coming from the *Lopatka*, where are burning mountains and warm ſprings, I imagine that they not only ariſe from the narrowneſs of the land, but alſo from ſubterraneous fires and vapours.

135 With regard to other advantages or diſadvantages of this country,
258 one may ſay in general, that its greateſt riches conſiſt in plenty
439 of good furs and fiſh, and its greateſt inconveniences in the want of iron and ſalt. The firſt they are ſupplied with from other

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

361 different buildings; the entrance into the fort is by a ſmall
563 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about
45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

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5: Jochelson A-5 (1910-11) 1928 Kamchadal

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The Russian Government repeatedly tried to introduce agriculture and gardening into Kamchatka. For this purpose peasants from Southern Siberia and European Russia were transferred several times to Kamchatka, but all experiments have failed and the imported husbandmen turned to fishing and hunting. Only in the valley of the Kamchatka River, near the village Kluchevskoye, small sowings of barley are still being made, but without any economic importance.

Experiments with gardening appeared to be more successful. Potatoes grow all over Southern Kamchatka where the digging of edible roots had almost ceased. Turnips grow there and the inhabitants of Kluchevskoye also grow cabbage, which heads well.

CLIMATE OF KAMCHATKA

132

The following data on the climate of the Kamchatka Peninsula are based on observations made in 1908–1909 by the members of the Meteorological Division of the Riaboushinsky Expedition headed by Dr. V. A. Vlasov.[1]

As climate is one of the most effective nature-agents regulating human life, data concerning three chief regions of the country will be given: the western coast, the eastern coast and the central part, represented chiefly by the valley of the Kamchatka River. The western and the eastern shores represent maritime climates, while the climate of the central part may be characterized as a continental one.

The climate of the western coastline of Kamchatka is more severe than that of the eastern, due to the cold Okhotsk Sea. During the winter cold winds prevail, blowing from the Siberian continent, the region of the great Siberian anticyclone. A late spring and a cold summer characterize the climate of the western coast. On the eastern shore of Kamchatka, under the moderating influence of the Pacific Ocean, frosts in the winter are not so severe. Rain and snowfall are more abundant. However, the cold current arriving from the Bering Strait and the amount of ice which it brings delay the beginning of summer and reduce its temperature.

The climate of the central Kamchatka, confined by its western and eastern mountain ridges, i. e., the valley of the Kamchatka River, distinguishes itself by all the peculiarities of a continental climate, having a cold winter and a comparatively warm summer. In order to demonstrate what has been said of the three climatic regions, mean annual figures for three points are given: for Tighil on the western shore, Petropavlovsk on the eastern shore and Kluchevskoye in the valley of the Kamchatka River.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
Tighil	−20.0	−19.8	−13.6	−2.2	2.4	6.2	11.3	12.1	7.0	−1.0	−7.4	−17.2	−3.5
Petropavlovsk	−10.9	−11.2	− 7.0	−1.6	3.1	7.9	11.8	13.5	9.8	4.2	−1.8	− 6.6	1.0
Kluchevskoye	−16.4	−15.2	−11.3	−1.5	4.6	8.5	12.15	13.1	8.8	−1.4	−7.8	−18.0	−2.0

[1] See V. A. Vlasov, The Kamchatka Expedition of F. P. Riaboushinsky organized by the Imperial Russian Geographical Society, Meteorological Division, vol. 1, part 1, *On the Climate of Kamchatka;* part 2, on *The Temperature of the Waters.* Moscow, 1916 (in Russian). Centigrade thermometers were used.

132 From this table it is seen that the climate of Tighil is much colder than that of Petropavlovsk and that the climate of Kluchevskoye, by its yearly and some of its monthly mean temperatures, is colder than that of Petropavlovsk, but by its summer temperature (May, June and July) it is warmer than that of Petropavlovsk.

Temperature of the soil. Monthly means, 1909.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Amplitude
Petropavlovsk:													
(1)	−10°5	−10°6	− 7°2	−0°5	8°8	14°5	17°6	15°6	10°9	.....	−4°7	−10°5	28°2
(2)	0.6	0.4	0.3	0.1	4.9	9.3	.....	13.4	10.9	.....	1.9	0.9	13.3
(3)	1.9	1.6	1.4	0.9	3.1	6.5	.....	12.1	10.4	.....	3.6	2.4	11.2
(4)	3.8	3.4	3.0	2.6	1.6	2.7	.....	6.8	7.1	.....	5.2	4.4	5.5
Kluchevskoye:													
(1)	−15.1	−17.3	−12.2	−2.4	10.2	15.6	19.2	15.9	.....	.....	−8.3	−19.3	38.6
(2)	− 9.5	−10.3	− 7.8	−3.1	3.5	9.3	12.8	12.4	.....	.....	−3.0	−10.4	23.2
(3)	− 1.2	− 2.6	− 3.8	−2.2	−0.8	0.0	3.0	4.0	.....	.....	1.7	0.1	6.8
(4)	1.4	1.0	0.7	0.5	0.4	0.4	0.4	[illegible].4	.....	.....	2.7	2.1	2.3
Tighil:													
(1)	−15.3	−20.3	−14.0	−2.8	6.8	13.0	15.7	12.3	8.4	1.7	−6.1	−15.6	36.6
(2)	−11.9	−14.7	−12.0	−3.9	1.6	6.9	10.6	10.7	8.1	2.7	0.8	0.4	25.4
(3)	− 3.1	− 6.2	− 6.9	−4.4	−0.3	0.0	1.1	4.0	5.1	3.0	0.9	0.3	12.0
(4)	0.4	0.0	− 0.3	−0.9	−0.6	−0.2	−0.2	−0.2	0.0	0.3	0.3	0.2	1.2

(1) means on the surface; (2) means 0.25 meter deep; (3) means 1.0 meter deep; (4) means 2.0 meter deep.

This table is compiled from the numerous data on this subject by Vlasov, in order to show what time of the year may be regarded as the most favorable for making excavations in Kamchatka. In Petropavlovsk from May to September inclusive; in Kluchevskoye from July to September; in Tighil in August and September, and even in these two months we meet the freezing point at the depth of two meters. My own experience in that region gave still less favorable results. While digging on June 11 on the bank of Kulki River, a tributary of Tighil River, not far from the village Tighil, I met frozen soil at the depth of one foot and down. According to Vlasov only at the depth of more than 1 meter (3.28 feet) is the soil in Tighil frozen in that month.

SOMATOLOGY

144 The present Kamchadal have become mixed with Russian settlers and many
177 have lost their former Koryak-like appearance, even in places where officially no Russians are recorded. The same may be said of the inhabitants of the southern villages, Yavino and Golyghino, who in former times might have been physically influenced by the Kurilians (i. e., the Northern Ainos). The Kurilians had intercourse with the Southern Kamchadal, and some Kurilians had settlements on the southern extremity of the Kamchatka Peninsula.

141 The measurements of Kamchadal taken by Mrs. Jochelson show that the Russian metisation influenced very little the physical character of the Kamchadal. 158 men and 170 women were measured. The following table gives some of the measurements and indices.

7:Lesseps T-3 (1787-88)1790 Kamchadal

651 pay their tribute in ſkins of theſe animals, as I ſhall explain hereafter *.

132 Two phenomena in the heavens were obſerved at the north-weſt, during the nights of the 13 and 14. From the deſcription that was given of them, we judged that they were auroræ boreales, and we lamented that we were not informed time enough to ſee them. The weather had been tolerably fair during our ſtay at the baths; but the weſtern part of the ſky had been almoſt conſtantly charged with very thick clouds. The wind varied from weſt to north-weſt, and gave us now and then a ſhower of ſnow, which did not yet acquire conſiſtency, notwithſtanding the froſts which we experienced every night.

000 Our departure was fixed for the 17 Octo-

* Theſe ſkins are not only a conſiderable branch of commerce, but ſerve as a ſpecies of money with the Kamtſchadales.

ber,

[October, 1787--analyst]

492 throw is not the conſequence. In falling, it is ſtill neceſſary not to quit the vehicle, but to hold it as firm as poſſible, in order to create a ſufficient weight to impede the dogs, who, as I have already ſaid, will otherwiſe advance full ſpeed. The common mode of ſitting in a ſledge is ſide ways, as a lady rides on horſeback; we may alſo ſit aſtride; but the point of main difficulty, the *ne plus ultra* of addreſs and of grace, is to be able to ſtand upon one leg: it is excellent to ſee an adept in this ſtriking attitude.

For myſelf, I was no ſooner able to drive, than I abandoned every other mode of conveyance. Always accompanied, becauſe of the roads, I ſometimes took a ride, and
132 ſometimes went a hunting. The tracks of hares and partridges were perceptible on the ſnow*, and to ſuch a degree, that it appeared

* The ſnow began to fall 5 November, and ſo heavily, that the country was covered almoſt immediately. But the froſt

7: Lesseps T-3 (1787-88) 1790 Kamchadal

peared full of holes like a ſieve. The ſnow was frequently ſo deep in the woods, that it was impoſſible to proceed a ſtep without ſinking in; our reſource in that caſe was to quit our ſledges, which were no longer ſerviceable to us, and turn them upon their ſide. Having taking this precaution, which was ſufficient to retain our dogs, who immediately laid themſelves down in a circular form upon the ſnow, and patiently waited the return of their guides; we faſtened to the ſoles of our feet, with leathern thongs, rackets, made of thin board *, ſix or eight inches wide and four feet long, the front of which turned up like ſkates, and the bot-

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froſt being later, and guſts of wind continuing almoſt without ceſſation, the ſledges could not conveniently be uſed till a conſiderable time after, as will be ſeen in the ſequel.

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* Theſe rackets are called *ligi*. In the northern part of the peninſula they uſe another ſort of racket, called *lapki*, which are ſhorter, and made of leathern thorns twiſted, like the ſtrings of a tennis racket; two ſmall ſharp pointed bones are fixed in the bottom, which penetrate the ice, and are a preſervative againſt ſliding.

tom

7:Lesseps T-3 (1787-88)1790 Kamchadal

TOWARDS THE END OF NOVEMBER THE COLD
132 became on a ſudden ſo ſevere, that in a few
166 days the rivers were all frozen, even the Bol-
226 chaïa-reka, which ſeldom happens, becauſe of the extreme rapidity of its current. The next day it got rid of the ice that covered it, and from that time I ſaw no more ſtop before Bolcheretſk, lower than the houſe of the governor. Though frozen in various places, it preſents a great number chaſms, where the water is ſeen to flow as uſual.

On each ſhore of the peninſula, there is a ſenſible difference in the atmoſphere. During the fine weather, a drought prevailed at Saint Peter and Saint Paul's, whereas at Bolcheretſk they complained of frequent ſhowers; meanwhile autumn had not proved this year more rainy than common. Very heavy rains are injurious in this country, becauſe they occaſion floods, which drive the fiſh from the rivers; a famine moſt diſtreſſing to the poor Kamt-

132 ſchadales is the reſult, as it happened laſt
166 yea- in all the villages along the weſtern
226 coaſt of the peninſula. This dreadful calamity occurs ſo frequently in this quarter, that the inhabitants are obliged to abandon their dwellings, and repair with their families to the borders of the Kamtſchatka, where they hope to find better reſources,
000 fiſh being more plentiful in this river. M. Kaſloff had intended to proceed along the weſtern coaſt, having already made his viſit through the eaſt; but the news of this famine determined him, contrary to his wiſhes, to return, rather than be driven to the neceſſity of ſtopping half way, or periſhing with hunger from the difficulty of procuring dogs and proviſion.

132 The wind varied conſiderably during my reſidence at Bolcheretſk; it was moſt commonly weſt, north-weſt, or north-eaſt; it blew ſometimes from the ſouth, but ſeldom from

7:Lesseps T-3 (1787-88)1790 Kamchadal

132 from the eaſt. The ſouth and weſt winds are almoſt invariably attended with ſnow. Scarcely a week paſſed, even to the month of January, without our experiencing two or three violent tempeſts; they commonly proceeded from the north-weſt. Theſe gales of wind laſted always a day or two, and ſometimes ſeven or eight days. It would have been the height of imprudence to venture out at ſuch a ſeaſon. The ſky was completely obſcured, and the ſnow, ſupported by theſe whirlwinds, formed in the air a thick fog, that prevented us from ſeeing at the diſtance of ſix yards. Woe to all travellers who are expoſed to this terrible weather! neceſſity compels them to ſtop, or they run the riſk of loſing themſelves, or of falling every moment into ſome abyſs; for how is it poſſible they ſhould find their way, or advance a ſtep, when they have to reſiſt the impetuoſity of the wind, and to diſengage themſelves from the heaps of ſnow

361 From Malkin we went to Ganal, which is forty-five werſts, but we were unable to travel with the ſpeed we had expected. The Biſtraïa was not completely frozen, and we were obliged to wind about and to croſs woods, where the ſnow, though deep, was ſo far from firm, that our dogs ſunk to their bellies, and were extremely fatigued. This induced us to abandon this road, and make again for the Biſtraïa. We came up to it at ten werſts from Ganal, and found it in the ſtate we had wiſhed. The ſolidity of the ice promiſed us expeditious travelling, and we readily embraced the advantage. We followed this river till we came to the oſtrog which is upon its bank, and conſiſts of four iſbas and twelve balagans. It offered nothing remarkable.

132 We only learned that there had been ſome very terrible hurricanes, and that they had not yet ſubſided, though their force was con-

7:Lesseps T-3 (1787-88)1790 Kamchadal

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It preſents to our view merely a cluſter of houſes, with three ſteeples riſing above them, and is ſituated upon the border of the Kamtſchatka, in a baſon formed by a chain of mountains that raiſe their lofty heads around it, but which are however at a tolerable diſtance. Such is the poſition of the town of Nijenei, of which I had a higher opinion before I ſaw it. The houſes, amounting to about a hundred and fifty, are of wood, built in a very bad taſte, ſmall, and buried beſide under the ſnow, which the hurricanes collect there. Theſe hurricanes prevail almoſt continually in this quarter, and have only ceaſed within a few days. There are two churches at Nijenei, one is in the town, and has two ſteeples; the other belongs to, and is in the circuit of the fort. Theſe two buildings are wretchedly conſtructed. The fort is almoſt in the middle of the town, and is a large paliſaded encloſure of a ſquare form. Beſides the church,

the

132 conſiderably diminiſhed. There is no difficulty in accounting for the violence of theſe tempeſts. The ſurrounding high mountains form ſo many receſſes in which the wind is embayed. The fewer avenues it has to eſcape at, the more impetuous it becomes: it ſeeks out a paſſage, ruſhes through the firſt that offers, breaks out in whirlwinds, ſcatters the ſnow over the roads, and generally renders them impaſſable.

000 Having ſpent a very indifferent night in the houſe of the toyon of Ganal, we ſet off the next day for Pouſchiné. The diſtance is ninety werſts, which however we performed in fourteen hours; but the laſt half of the journey was very painful. No road being opened, our ſledges ſunk three or four feet in the ſnow, and the jolts were ſo frequent, that I was happy to eſcape with being only once overturned. We judged from the ſnow upon the trees, that it muſt

22: Guillemard T-2 (1882) 1886 Kamchadal

435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 On the morning of August 22d we came for the first time to a
137 *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our
132 course—for we were on what a native would doubtless call the
487 "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 We reached Narchiki early in the afternoon, and were greeted
361 by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 Narchiki is placed on a little branch of the Avatcha River,
136 which is here not more than eighteen inches deep. Standing upon
226 its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our
136 horses nearly stepped upon them. Their back fins were visible as
226 far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 137 Our road, some time after leaving Narchiki, had led to the west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature of northern landscapes, we put up several coveys of ptarmigan; and on the outskirts of a small wood we obtained our first Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

132 136 231

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000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun, —a speck of steely blue against the snow beyond.

132 Gunal, with its enormous stores of salmon, seemed, like all
251 these Kamschatkan villages, a place of considerable size. A
343 nearer acquaintance, however, soon dispelled the illusion, and we
361 noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

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The sun heat was, indeed, so great that we gladly took refuge in
132 the tent, and at noon the mercury stood at nearly 80° Fahr. in the shade. These hot days are not unusual at the end of August, and constitute a sort of Indian summer, which, as in Lapland, is but the immediate precursor of an autumn so short as hardly to be dignified by the name of a season. At sunset the temperature fell rapidly, and at night it was so cold that we were glad of four blankets, the thermometer being at or about freezing point. A range of something like fifty degrees in a single day is not often seen, but weather of an almost exactly similar kind is met with during winter on the high table-lands of Southern Africa. The Kamschatkan autumn cannot always be relied on, for, from what we could gather from the natives, it is not unfrequently attended with a very heavy rainfall, and occasionally with much wind.

136 We had hoped to find Bighorn in the mountains in the neighbourhood, but, greatly to our disappointment, the people of the village told us that these magnificent sheep never come down to the lower spurs of the range before winter, and that it was useless to go after them. This was the second time we had to give up the idea of hunting them. We were, however, more fortunate with the bears, and succeeded in bringing one to bag upon the first day after our arrival.

[of Gunal--Analyst]

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563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.
132 The current of the river is rather swift here and at Werchni, and
133 we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281 While at Melcova we tried to get some of the reindeer-skin
291 dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

22: Guillemard T-2 (1882) 1886 Kamchadal

133 composed were less pleasing to a sailor's than an artist's eye; and it was with a certain relief that, on the return of the lifeboat we had sent to coast the shores of the bay, we learnt that no trace of walrus was to be seen. With the prospect of bad holding-ground and no shelter to speak of, we resolved on trying farther to the north, and therefore, without anchoring, made at once for Cape Klin, our original destination.

We kept within a mile or two of the land, expecting to arrive in an hour or less, for the distance between Capes Shipunsky and Klin was barely twelve miles by the chart. We found, however, that the distances were as little to be relied on as the outline of the coast, and we had logged thirty-six miles before stopping the 000 engines abreast of the cape. We rowed along the beach in vain in search of the game. Not a walrus was to be seen, but on nearing a little group of rocks we noticed a large mass lying upon the beach, and landed to find ourselves in the midst of a scene of slaughter which sufficiently accounted for the absence of our quarry. The crew of the schooner had evidently had good sport, for the shore was dotted here and there with the bodies of the slain, which were blown out to a gigantic size by decomposition. That there were still plenty of walrus in the neighbourhood was evident, for on our return to the ship the animals played in numbers around the boat; but, unlike the fur seal, they will not "haul up" on the shores where others of their species have been killed, and we had therefore to give up all hope of obtaining them at Cape Klin. The walrus restricts itself more or less to certain favourite spots for landing, and a random search for them along the coast would have been attended with but little success. It is nearly impossible to kill them in the water except by harpooning, for the only fatal shot—a small spot at the nape of the neck—is very rarely obtainable, and the animal, if struck there, usually sinks at once.

132 Our search having thus proved fruitless, there was nothing left
133 for us but to return to the neighbourhood of Cape Shipunsky, in the hope of obtaining some of the bighorn or mountain-sheep

132/133 which, according to Jacof Ivanovitch, were to be found there in abundance. A few years previously he had visited Betchevinskaya Bay, a deep inlet ten miles to the west of the cape, and had shot several; and since, according to his account, both anchorage and shelter were to be had—a not unimportant consideration on such a coast—we again steered southward, and keeping a good offing during the night, ran in to the land and picked up our position off Cape Shipunsky at daybreak. The coast is steep-to, and as we passed close to the fine cliffs and headlands which oppose the by no means tranquil Pacific, there lay the *neiges d'antan* bewailed of Maistre François Villon,—huge patches of last year's snow, choking the gullies down to the water's edge. That they should have remained throughout the hot summer in a south-east aspect was astonishing, and gave some idea of the severity of the climate in these latitudes, but the absence of the usual autumnal rains no doubt in great measure accounted for it.

133/137 Before reaching our anchorage just within the entrance of the bay, we could distinctly make out small herds of the animals of which we were in search on the slopes of the cliffs, which here rose to a height of five or six hundred feet, precipitous in some places, but in others forming a sort of under-cliff covered with brushwood. We lost no time in settling our plan of action. Judging that the bighorn were confined to the promontory near which we had anchored, we resolved upon surrounding it, sending four guns to the top of the cliff, whose sea-face extended east and west for a distance of about three miles, and posting two others upon the beach below. The former, ascending in rear from the shores of the bay, reached their destinations with some difficulty, the undergrowth being so dense and strong that, but for the bear-paths with which it was cut up in all directions, it would have been impenetrable. At the edge of the cliff progression was somewhat easier, and on looking over we found ourselves in close proximity to the game.

000 Owing to the excitability of Jacof, who had got some distance ahead, we began the day in a manner I hardly like to recall. The

24: Lansdell-635 M-2 (1879) 1882 Kamchadal
116, 132

" The climate of Kamchatka is much milder than in the eastern parts of the mainland. The frost sets in about the middle of October, but up to December the temperature rarely falls 10 below the freezing point of Farenheit, though in severe winters the thermometer sometimes sinks to 25° below zero. Snow-storms with wind, called poorgas, are prevalent in February and March. They sometimes take up whole masses of snow, and form drifts several feet deep in a few minutes, burying, it may be, travellers, dogs, and sledges, who remain thus till the storm is over. Dogs begin to howl at the approach of a poorga, and try to burrow in the snow if the wind is cold or violent."

24: Lansdell-636 M-2 (1879) 1882 Kamchadal
116, 132, 137, 241, 286

" The valley watered by the Kamchatka is composed of fine mould, and has abundant natural productions- fir, birch, larch, poplar, willow, cedar, and juniper, and that of larger size than in the same latitude elsewhere in Asia. Raspberries, strawberries, whortleberries, currants, and cranberries abound; and flowers are seen in spring in almost tropical luxuriance. There is much grass in the lower lands, and Mr. Hill records an extraordinary phenomenon in a place he visited respecting the growth and preservation of potatoes. (1) There grows, likewise, a plant in the country called by

1. Admiral Ricord, a former governor of Kamchatka, imported potatoes for seed, and they were planted, but not taken up the following autumn. The next year, being found abundant and good, they were allowed to remain, where , dying and propagating continually, they yielded more than were locally required. Mr. Hill accounts for the phenomenon by the fact that neither damp nor frost could reach the potatoes; for though in winter the snow covers the surface of the frozen ground, yet so great in this vicinity is the internal volcanic heat that the earth is quite dry, and never frozen below a few inches from the surface.

the natives krapeva , from which they make a coarse but very durable cloth. It resembles our stinging -nettle, but is of larger growth and stronger fibre."

27: Sauer--147 T-2 (1789-93) 1802 Kamchadal
116, 132

"We passed a pleasant and agreeable winter in different excursions to Bolshoiretsk, &c. enjoying all the good things in Kamtshatka, and perfect health. The frost was generally 5° to 8°. The severest cold that we had did not exceed 18°, and lasted only a few hours. Snow was very deep."

27: Sauer--214 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"We passed the winter [CMC: 1790-1791] in excursions of pleasure, and in dancing and card parties, chiefly at Bolshoiretsk, where the luxuries of life are more plentiful than in the harbour of St. Peter and St. Paul. The frost was sometimes very severe, and we had for a few hours 21° below the freezing point of Reaumur. Two or three earthquakes happened about the neighbourhood of Neizshni; but, except a slight shock on the 21st November at noon, none of them reached the harbour of St. Peter and St. Paul.

...

...

By the 1st of May the bay of Avatska was clear of ice, and not before, owing to the feverity of the winter: but the inner harbour of St. Peter and St. Paul remained frozen up."

27: Sauer--290-291 T-2 (1789-93) 1802 Kamchadal
116, 132, 133, 137, 824

"The productions of nature [CMC: in central Kamchatka] are, a small kind of wild black cherry (tsheromka), in great abundance; the wood of which, being particularly hard, is used by the Kamtshadals for their guiding sticks to the sledges: the thickest trees that I have seen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary size, with birch, poplar, asp, and mountain-ash, clothe the mountains to their summit. The underwoods are, currant, dog-rose, hawthorn, alder, and bushes producing berries.

The climate is very different from that of the southern and northern parts of the peninsula, the valley being completely sheltered from the sea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The scenery is beautiful beyond description, [291] the river meandering through the midst of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every species of salmon in the season. This valley is 180 miles in length, frequently opening prospects of the Tolbatshinsk, a lofty double-headed mountain, constantly emitting an immense column of black smoke; while the second volcano, Klutshefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand."

27: Sauer--297 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"The harbour of Tareinsk opens to the west: the entrance is about one mile in length, when it suddenly turns to the south-east, extending twelve miles in length, and three in width: the depth is from six to eight fathoms, mud and sand. A narrow neck of high land at the bottom, like an artificial partition, separates it from the sea. This harbour, although extremely convenient in its construction, is not so in its situation; as an easterly wind is absolutely necessary to bring outward bound vessels into the bay of Avatsha where it is quite contrary; besides, it is exposed to the north and north-west winds, which blow over the plains of Avatsha right into it, and keep it blocked up by ice till late in the season."

361 ment so far as to induce them to export doctors to,
563 and import priests from Kamtchatka. I mean no disrespect to those reverend gentlemen, but just to hint, as my opinion, that instead of the soul only, it would be better to take care of the soul and body at the same time. The average number of people annually admitted to the hospital books is three hundred and fifty, nearly twice its whole population, who are chiefly employed in fishing and trading with the neighbouring Koriaks or Kamtchatdales. The place also serves to keep up the winter communication with Okotsk. For the Koriaks will not furnish rein-deer or dogs to carry the post, unless they are remunerated by a present of tobacco, spirits, &c.

000 From what I have seen of the Koriaks, both in Tygil and in their encampments to the southward, I have no doubt of their being of the same tribe as the Tchuktchi; they have the same features, manners, and customs, and the same language—the same love of independence, and are, in truth, less scrupulous of giving offence to the Russians than their northern neighbours, for they frequently break out in hostility with the inhabitants of Tygil, unless a supply of spirits and tobacco is sent to them, for which, however, they barter reindeer and furs.

132 The climate of Tygil is cold; already had the
563 thermometer passed 28° of Reaumur. The Cossacks however, contrive to raise a few vegetables, as po-

39:Cochrane T-2 (1821-22)1824 Kamchadal

133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to
133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga;* we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 and his dogs: nothing can exceed the devastation,
133 or be compared to it, but the effects of the wind on sandy deserts or mountains. I have known instances of people detained for twenty and thirty days in this tremendous pass, and it is seldom that it is crossed without a gale. And yet all this difficulty and danger might be obviated simply by the erection of crosses or mounts, as in the northern parts of Siberia, where I have seen in the distance of thirty or forty miles, a small mound of earth, with a white and black chequered cross placed at every one hundred and fifty yards.

133 The night was exceedingly cold, and the snow
137 and wind prevented our even enjoying the luxury of a cup of tea, for no fire could be lighted. Crossing a second toundra, desert, of seven miles wide, with infinite labour to the dogs as well as ourselves, we entered upon a most magnificent country. Lofty, straight, and stout firs lined the right of the valley, while the dwarfish larch, and alder, mixed with birch, stood upon the left in all their bandied and
000 crooked shapes. The contrast was extremely pleasing as we glided along the milky valleys at a rapid rate. Immediately upon clearing the desert the snow and wind ceased, and we hailed the return of fine cold weather. Not long after we overtook a caravan of nartes in great distress, having been detained ten days in the mountains by the weather. The dogs had been without food for three days, and were evidently in the last stage. In the early

563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574 I continued on for Pouschin, twenty miles, and
576 arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of scrofula is become hereditary. In this part of the peninsula the chase is scarce, and the inhabitants mostly subsist upon fish, a few mountain sheep, and wild rein-deer, being the only meat they taste from one end of the year to the other. The situation is fine and highly productive in fish, but at this moment there are not a sufficiency of people to transact the ordinary business; a circumstance which calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous country, which is more than compensated by the succeeding richness of a valley eighteen miles in length. I crossed several times the Bistra, a rapid stream, uniting with the Bolshaya Reka, and was again obliged to become pilot, chief, and dog-master; however, I managed very well, and arrived early. Malka is deserving of little notice, yet is said to be celebrated for its baths! The situation is magnificently grand; the hospital stands in the bosom of a lofty chain of elevated mountains at two miles from the village. I was welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2 (1821-22)1824 Kamchadal

CHAPTER XI.

General Observations on the Peninsula of Kamtchatka.

000 KAMTCHATKA is a large peninsula of an elliptical figure, extending from the latitude of 59° to 51° N; the breadth is inconsiderable. A magnificent chain of mountains, with numerous sopkas or peaks, extend from north to south, the whole length of the peninsula, from which mountains numerous rivers, large and small, find their way into the ocean. Of these the Kamtchatka is the only navigable one, admitting vessels of one hundred tons as far as one hundred and fifty miles up the stream. All the rivers are, however, crowded with fish of superior flavour. There are also lakes of considerable size, and so numerous, that all intercourse between the several parts of the Peninsula is, during spring, summer and autumn, effectually precluded.

132/137 The productions of the country are few but valuable. There is an abundance of wood, as fit for ship-building as for general use. The finest timber is found on the banks of the Kamtchatka, Yelofka, and eastern coast, but the climate is such as to induce me to believe that neither corn nor vegetables will ever attain to great perfection; the soil in all seasons, at the depth of twenty-four to thirty inches, being frozen. Potatoes never ripen, cab-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 bages never come to a head, and peas only flower;
137 but turnips and radishes thrive amazingly. Grass of the most nutritious quality is found in the greatest abundance, as well in the numerous meadows as in the forests. It grows to the height of between five and six feet, and in some places three crops are produced within the year.

132 Winter may be said to occupy near one half of the year, spring and summer the other half. The winters are mild when compared to those of Siberia; the thermometer never descending, in the southern parts of the Peninsula, below 20° of Reaumur, and seldom below 12° and 15°. Spring is the most agreeable time, just when the leaves put forth, and it is then the fishing commences. The summer is the most disagreeable portion of the year, owing to the heavy rains and heavier fogs which come from the eternally snow-clad mountains. The greatest heat is in July, when the thermometer is at 27° and 28°. The snow lying upon the ground seven and eight months will sufficiently account for the want of cultivation, but indeed the remaining four can hardly be considered as equal to more than two months in other places; for the sun at St. Peter and St. Paul's has no effect upon the earth during more than four hours of the day, and from the immense height of the mountains, it is only from ten o'clock until two that any heat is felt.

251 This absence of heat, and these changes of climate, with the very heavy fogs, which account for

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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sides trade. Of late the Emperor has given the clergy an allowance of flour as well as a regular salary, and it may therefore be hoped that the natives will, at least, be so far benefited as to have fewer of their visits, except on their spiritual concerns.

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Whether the Russian government will pay any attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing remarkable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

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[in the winter of 1821-22--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 end of May the snow had entirely disappeared, and Spring, in the course of a few days, made her welcome appearance; wild flowers and vegetables were every where springing up, and enlivening the dreariness of the last seven months. Even the rigging of the transport which was to carry me back, excited my interest, and reminded me of former times. The attention of the inhabitants was sufficiently engaged by the accession of fish, as herrings in the inner harbour, cod in the outer
222 haven, and seals every where. Some among them proceeded to the islands at the mouth of the haven, and brought in some thousands of eggs, while others were out in shooting parties, sending us in snipes,
132 wild ducks, and partridges. The wild garlic made its first appearance at Cape Garlick so early as the 15th of May.

000 Only a few individuals died in the hospital, most of them with the scurvy; the remainder were soon restored to sound health by Spring and fresh fish. Our evening walks were sometimes extended to the summits of the hills, where we took our tea or smoked a segar; but latterly the little place,—I cannot call it a town,—became overflowed from the melting of the snow, and it was with difficulty we could move about. In the month of June a vessel arrived from Canton and Manilla, in ballast, having failed in procuring a cargo of flour. By that vessel I received a most friendly letter from Mr. Urmston, the chief of the British factory, together

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

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342 /359/ Like the earth yurt, all the pile buildings mentioned above, the summer yurt, the storehouse, etc., are original,
343 peculiarly Gilyak structures which the neighbors of the Gilyak,
171 the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to
K [175] Krascheninnikof's and Steller's descriptions and an illustration
[342] given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan
000 by the Russians (1). The Eskimo of the American Northwest along

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1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

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112° 53′ eaſt longitude, and thence to *Bolſcheretſkoi* or the Great River 14° 6′ eaſt. The figure of the peninſula of *Kamtſchatka* is ſomewhat elliptical, being broader towards the middle, and growing narrower towards both ends. Its broadeſt place is between the mouth of the river *Tegbil* and the river *Kamtſchatka*. Towards the ſource they are joined by the river *Elouki*. 131

The *Elouki* runs in the ſame latitude with thoſe rivers for 415 verſts. They call the ſea which ſeparates *Kamtſchatka* from *America* the Eaſtern Ocean. On the weſtern ſide lies the *Penſchinſka* ſea, which begins near the ſouthern point of the cape of *Kamtſchatka* and the *Kurilſki* iſlands, and runs northward between the weſtern coaſt of *Kamtſchatka* and the coaſt of *Ochotſkoy* more than 1000 verſts. The northern part is called the bay of *Penſchinſka* from the river *Penſchina* which falls into it. The hills make one continued ridge from north to ſouth through the peninſula, almoſt equally dividing the country. From this ridge ſeveral others extend towards the ſea, between which are the courſes of the rivers. Theſe ridges ſometimes run a conſiderable way into the ſea, and are called Noſs, or capes. There are more of theſe upon the eaſtern than the weſtern coaſt. All the bays between the capes are called, in general, ſeas; each having its particular name, as the *Olutorſky* ſea, *Kamtſchatka* ſea, *&c.* We ſhall hereafter give our reaſons for calling the whole peninſula by the name of *Kamtſchatka*, though in fact it hath in none of the different languages of the inhabitants any general appellation; but every part of the country receives its name from its inhabitants, or ſomething remarkable obſerved in it: and even the *Ruſſian* Coſſacks underſtand *Kamtſchatka* to be only the country lying near the river of that name; and to the other parts of this peninſula they have given the following appellations: 133 103

Kurilſki Country is the ſouthern part, ſo named from the *Kuriles* that inhabit it.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 *The Coaſt* extends from the *Bolſcheretſkoi* or Great River to the *Tegbil.*

Awatſcha extends from the *Bolſcheretſkoi* to fort *Awatſcha.*

Bobrovoi or *Beaver Sea* is the diſtrict round *Kamtſchatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtſchatka* to the *Tegbil.*

Ukoi is the eaſtern coaſt from the river *Ukoi.*

Tegbil is the weſtern coaſt from the river *Tegbil.*

133 *Kamtſchatka* is plentifully furniſhed with rivers; however they
361 are ſo little that none of them are navigable by the ſmalleſt veſſels,
563 except the river *Kamtſchatka*, which will carry ſmall veſſels 200 verſts upwards from its mouth. Into this river it is reported that ſome *Ruſſians* were brought by ſea, long before its ſubjection to *Ruſſia.* It is at preſent called *Theodotoſhine*, from the chief of thoſe people thrown a-ſhore, whoſe name was *Theodot.* Next to this, the moſt conſiderable rivers are, the *Bolſchaia-reka*, or Great River, *Awatſcha* and *Tegbil*; upon which the *Ruſſians* have ſet-
133 tlements. *Kamtſchatka* is likewiſe very well furniſhed with lakes, particularly about the river of that name, where they are ſo numerous that there is no paſſage over land in the ſummer-time. Some of them are very large: the moſt conſiderable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtſchatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilſkoy*, out of which runs the river *Oſernoi.*

133 The river *Kamtſchatka* riſes in a marſhy ground, and firſt runs
712 north-eaſt; then inclines more to the eaſt, and turning at once
R towards the ſouth-weſt, falls into the ocean in 56° 30′ north
177 latitude. From its ſource to its mouth, in a ſtrait line, is 496
.71 verſts; but the length of its courſe, according to the exactest computation, is about 525 verſts; during which it receives into it many brooks and rivers. About two verſts from its mouth, upon the right ſide, are three deep bays. There are ſeveral forts built along the banks of this river by the *Ruſſian* Coſſacks, to

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awe and keep in ſubjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtſchatka* on the left ſide, and its head meets that of the *Tegbil*.

The *Tegbil* runs almoſt in the ſame latitude with the *Kamtſchatka*; and the ſtrait road from the one to the other is by the river *Elouki*. Some little forts and ſettlements of the natives are ſcattered here and there upon its banks.

The *Bolſchaia-reka*, or Great River, called by the natives *Keekſka*, runs out of a lake 185 verſts to the eaſt from its mouth, and falls into the *Penſchinſka* ſea in the latitude of 52° 45′. Its mouth is reckoned to be 555 verſts to the ſouth diſtant from that of the *Tegbil*. It is called Great upon this account, that of all the rivers that fall into the *Penſchinſka* ſea this is the only one which they can navigate from its mouth nearly to its ſpring, and this not without ſome difficulty, on account of its rapidity and the great number of iſlands. At the time of high water it is ſo deep at the mouth that large veſſels may enter; for the water has been obſerved to riſe at full and new moon very little leſs than nine *Paris* feet or four *Ruſſian* yards. It receives a multitude of rivulets; the moſt conſiderable of which is the *Biſtroy* or Rapid River, ſo called from the ſwiftneſs of its ſtream, cauſed by the many ſhoals and cataracts. You may go from the mouth of the Great River to that of the *Biſtroy*, and up within 40 verſts of its head; and from thence over a carrying place to the river *Kamtſchatka*, that ſprings out of the ſame marſh, and runs quite to the Eaſtern Ocean. And though this paſſage muſt be laborious and tedious, upon account of the rapidity of the river, and the many ſhoals and cataracts, where every thing muſt be carried by land, and which would render it impoſſible to advance more than 10 verſts in a day (as I found in my way to *Kamtſchatka* in the year 1739, when the boats were carried over the marſh, about two verſts from the head of the Rapid, to *Kamtſchatka*); yet, conſidering

489 considering that all ſorts of carriages in the ſummer are worked from one ſettlement to another by men, the ſaid paſſage by water would be a great help to the people of this country who are obliged to carry ſtores and baggage for the government: for, inſtead of employing 10 or 15 men about a carriage of 20 pood, the ſame would be performed with leſs trouble in a ſmall boat by two; and to encreaſe the facility of commerce, there would at all times be a free road, which is the caſe now only in winter.

It may be hoped, however, that even without ſuch a road this difficulty will be removed, when the new colony ſettled there ſhall have a ſufficient number of horſes for drawing thoſe carriages. From the *Bolſcheretſkoi* to the upper fort you may travel in carts drawn by horſes; but, in ſummer, this is practicable in no other part of the country by reaſon of frequent obſtructions from rivers, marſhes, lakes, and high mountains.

133 The *Baranew* rivulet is particularly remarkable for the number of boiling ſprings which are found near it. It falls into the *Keekſha*, on the ſouth-eaſt ſide, 44 verſts from *Bolſcheretſkoi*; and upon the mouth of it ſtands the ſettlement *Kalickin*, or *Opachin*, which is about 70 verſts diſtant from the boiling ſprings.

The river *Awatſcha* riſes from under a mountain about 150 verſts from its mouth, and runs from weſt to eaſt 'till it falls into the bay of St. *Peter* and St. *Paul* in the Eaſtern Ocean, almoſt in the ſame latitude with the *Keekſha*. This river is very near as large as the laſt, and of more utility.

The bay of St. *Peter* and St. *Paul*, or *Awachinſkaya* bay, is 14 verſts in length, and as many in breadth, of a circular form, and ſurrounded on all ſides by high rocky mountains. Its mouth, conſidering the ſpace of the bay, is very narrow, and ſo deep that ſhips of all dimenſions may enter it without any danger. Upon its banks are built, by order of the navy, officers' apartments, barracks, magazines, *&c.* On the north ſide of the

Awachinſkaya

Awachinſkaya bay, almoſt oppoſite the *Kareemchin* fort, are two 133
high mountains, one of which ſmokes almoſt continually, and ſometimes burns.

The breadth of the cape of *Kamtſchatka*, between the mouth of the *Keekſha* and the *Awachinſkaya* bay, meaſures from ſea to ſea, by a ſtrait line, only 255 verſts; a diſtance much leſs than that between the *Tegbil* and the *Kamtſchatka*.

There are a multitude of rivulets which fall into the Eaſtern Ocean between the mouth of the *Awatſcha* northward, and the river *Kamtſchatka*, and from that again to the *Anadir*; but being of ſmall note, we ſhall only remark any thing that may be curious relating to them; among which may be reckoned the mountain *Shupanoveſkaya*, ſo called from *Shupanova* a ſtream near which it ſtands. This mountain is a volcano, and has ſmoked at the top in ſeveral places for many years, and ſometimes rumbles, but does not flame. The *Camel's Throat*, a rivulet near this hill, is re- 133
markable for the danger of its paſſage through a very narrow 823
valley, between high and ſteep mountains, from whence the ſnow 784
is apt to tumble upon the ſlighteſt accident, even, it is ſaid, from a ſtrong exertion of the voice; and, falling down in vaſt heaps, ſometimes buries paſſengers under it; for which reaſon the natives make it criminal to ſpeak aloud as they paſs through the valley: in other reſpects the road is very convenient. On the ſouth ſide 133
of the river *Shopbead*, or *Shupanova*, near the ſea ſhore, are a great many pillars or rocks, which appear above water, and make its entrance very dangerous; a little beyond this to the ſouth is a bay, called *Nutrenoi*, ſurrounded by rocky mountains, about four verſts in length and breadth; and near it, about the head of a rivulet, called *Shenmeek*, are large wells of boiling water. Out of a mountain near theſe ſprings, in many places, proceeds a ſteam, and the bubbling of boiling water is heard, but no ſprings have made their way through yet, though there are conſiderable fiſſures here and there, and the ſteam iſſues forth with the ſame rapidity

133 es out of the *Eclipile*, and is so hot that the hand cannot bear it. After passing through a very woody and mountainous country, we come to the remarkable stream *Krodakighe*, or the Larch-Tree River, which rushes out of the great lake *Kronotzkoy*, in such a cascade that one may walk under it: this lake is in length about 50 versts, reckoned to be 40 in breadth, and is near 50 from the sea. Around it are high mountains, two of which about the sides of the upper mouth of the rivulet *Krodakighe*, rise above the rest. Multitudes of rivulets empty themselves into the lake *Kronotzkoy*, whose springs are near those rivers which run into the *Kamtschatka*.

101 From this place, nothing worth remarking occurs 'till we
133 come to the *Kronotzkoy* Noss; and here begins the Beaver Sea, which extends to the *Shupinskoy*. The coast from the *Kamtschatka* to the *Kronotzkoy* Noss is every where sandy; and near the bay, called *Ukinskaya*, begin the habitations of the settled *Koreki*; but the *Kamtschadales* inhabit all the country to this place.[1]

103 The river *Nungeen*, which falls into *Nutrenoi* bay, is called, by the Cossacks, *Pankara*, because there was formerly on the south side of the bay a small *Koreki* fort of the same name; but the inhabitants having built a small fort on a high hill on the northern side of the bay, which they called *Gengota*, abandoned it: this fort is surrounded with a wall of earth about
000 a fathom high, and a yard thick, having within it a double pallisade, and on each side are two bastions raised. It has three gates to the east, west, and north. The *Koreki* purpose to leave their old fort, and to remove into the new one, which they have built about the inward point of the above-mentioned bay, and call it *Ueackang-Atenum*: this was the first place that I found fortified by the natives; for the others were nothing more than habitations dug in the earth, surrounded with huts, as with so many towers without any outward fortifications;

1 [all the country south of Ukinskaya Bay]

fications; but, on the contrary, further to the north, there is 000
not one ſettlement of theſe people which has not, beſides its natural ſtrength of ſituation, a wall to cover it. The *Koreki* in thoſe places ſay, that they thus provide for their defence againſt the incurſion of the *Tchukotskoi:* but as that people have never invaded theſe places, ſome other cauſe muſt be ſought for this precaution of the *Koreki*; and we can account for it only from their apprehenſions of the Coſſacks, who uſually travel this way.

Upon the north point of a bay which receives the *Kitkitannu*, 133
a rivulet, there is a ſmall fort built on a high rock, and fortified by a wall of earth about 10 feet in height. Its gates are on the eaſt and ſouth ſides. The inhabitants of it are under the commander of the ſmall fort *Keemgu*, whom the Coſſacks call a *Ruſſian*, he being of that extraction. From this fort there is a low cape that projects into the ſea; beyond this cape there is a deep bay of about eight verſts in breadth, and equally as broad at its mouth as in the middle; but all the reſt of the bays which I have ſeen are narrow at their mouths. Into this bay the river *Karaga* enters by two mouths, and almoſt meets near its head with the *Leſnaya* river, to which they uſually go from the *Karaga*. On the north ſhore of the bay there ſtands, on a high hill, the ſmall fort *Keetalgeen*, in which every hut is inclosed with a paliſade. Beſides this ſmall fort on the river *Karaga*, there are two other ſettlements of the *Koreki*. Overagainſt the mouth of the *Karaga*, 20 verſts from the ſhore, is an iſland, called *Karaginſkoy*, the lower end of which is oppoſite to *Nungeen*, and the upper end to *Kute* cape. *Koreki* in- 101
habit this iſland; but thoſe on the continent do not allow them to be of the ſame race with themſelves; and it muſt be obſerved, that the manners of the *Karaginſkoy* appear as barbarous to the *Koreki*, as thoſe of the *Koreki* do to more
civilized nations.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 civilized nations. Their number is reckoned to be 100 men or more, but not above 30 of them pay any tax, the reſt, at the time of its gathering, hiding themſelves in the mountains. They go to this iſland in the ſummer in their little boats; but in the winter they have no communication with it.

133 There is little worth notice after you paſs the above-mentioned
721 iſland, 'till you come to the *Uyulen* or *Olutora* river. Upon this
R river the *Ruſſians* twice built the *Olutorſkoy* fort. The firſt was
177 built by a native of *Jakutſki*, called *Athanaſey Petrove*, upon
.71 the ſouthern ſhore, very little above the mouth of the *Kalkina* rivulet which falls into the *Olutora* from the ſouth; and the ſecond a great deal below that place under the direction of Major *Paulutſkoy*, who was ſent there on account of the rebellious *Tchukotſkoi*; but both of them were forſaken and burnt down by the *Olutores*. The laſt fort is about two days' voyage from the mouth of the *Olutora*.

133 The *Atwaleck* cape, which extends 80 verſts into the ſea, begins near the river *Elir*, and points towards the *Govyannoy* cape. The ſea between thoſe capes is called *Olutorſkoy*. The *Pockatska* riſes in the ſame plain with the river *Glotova*, which runs from the north-eaſt into the *Olutora*. From the *Kalkina*, where was built the firſt *Olutorſkoy* fort, to the river *Pockatska*, is five days' journey with rein-deer, reckoning for each day between 30 and 40 verſts. Between the *Katurka* and the land oppoſite to *Anadir*, there projects into the ſea a rocky cape, called *Kateerſkoy* in 64° 15′ north latitude. The diſtance from the *Petropaulauskaya* haven to the mouth of the *Anadir*, as obſerved by the ſea-officers, is 19° 20′; and the ſea coaſt from the *Kurilskaya Lopatka* to the *Tchukotskoi* cape, north eaſt, which lies in 67°, is for the moſt part mountainous, eſpecially in thoſe places where the capes project into the ſea.

We

We now come to confider the rivers that fall into the Eaft Sea from the mouth of the *Awatfcha*, towards the fouth, to the *Kurilskaya Lopatka*; and from the *Kurilskaya Lopatka* into the *Penfchinska* fea to the *Tegbil* and the *Puftaia* rivers. /133

There are but few rivulets that interfect the country between the mouth of the *Awatfcha* and the *Lopatka*. The ridge of mountains, which divides *Kamtfchatka*, extends to the Eaft Sea: the declivity is fteep and craggy; and the gulphs and bays, which are formed by thefe mountains, afford a fafe harbour for veffels of any burthen in the worft weather.

The *Kurilfkaya Lopatka*, which by the natives is called *Kapoore*, is the fouthernmoft point of the cape of *Kamtfchatka*, and divides the eaftern from the *Penfchinska* fea: it takes its name from its refemblance to a man's fhoulder-blade. Mr. *Steller*, who has been upon the *Lopatka*, fays, that the place is not more than 10 fathoms above the furface of the fea, and for that reafon is fubject to great inundations, fo that for 20 verfts from thence no-body lives, except thofe who come there in the winter to catch foxes; and when the ice is carried thither with the beavers on it, then the *Kuriles*, who follow this ice along the fhore, affemble here in great multitudes. Within three verfts from the *Lopatka* nothing grows except mofs; and there are neither rivers nor fprings, only a few lakes and pools. The foil confifts of two layers, the lower is ftrong, and the upper fpongy; and its furface is full of hillocks, and ufelefs. The firft rivulet falling into the *Penfchinfka* fea, is called the *Utatumpit*; two verfts from the *Utatumpit*, the rivulet *Tapgutpan* runs into the fea, upon which ftands a fmall fort called *Kochinskoy*; and three verfts from thence is the *Pitpuy*, or *Ozernaya*, which runs out of a confiderable lake divided from the fea by a mountain. The *Ruffians* call this river *Kambala*, or Flounder River, becaufe great numbers of flounders are caught in the mouth of it. /103 /133 /134 /137 /133

 The

133 The lake out of which it runs, and the mountains which lie between it and the ſea, are called by the ſame name. Near the *Kambalinſkoy* lake is built *Kamabalinſkoy*, a ſmall *Kurilſkoy* fort. From the *Kurilſkoy* lake, towards the ocean, ſtrait to the *Awatſcha*, is not above 19 *German* miles; but the road is exceſſively difficult; for you muſt paſs over eleven high mountains, and ſome of them are ſo ſteep that travellers are obliged to let themſelves down with ropes.

About this lake are ſeveral remarkable mountains; particularly two, one on each ſide of it, which emit ſmoke, and have done ſo many years; and which Mr. *Steller* ſays he ſaw in his journey from the *Yavina* to the *Ozernaya* river.

Though I went as far as the river *Ozernaya* in 1738, yet I did not ſee thoſe mountains, and only obſerved hot ſprings in two different places. Theſe ſprings run within 20 verſts from its mouth, ſome of them into the river *Pauſtia*, and others into the river *Ozernaya*, both of them on the ſouth ſide of it.

The river *Apanach* is reckoned the boundary of the province of *Kurilſkoy*. It runs from under the mountain called *Opalſkaya Sopka*, which is 85 verſts from the ſea, and excels all the reſt of the mountains about the *Penſchinſka* ſea both in height and fame; particularly on this account, that it can be ſeen by ſeamen from both ſeas, and ſerves them for a land-mark.

The ſhore from the *Lopatka* almoſt to the *Kambalina* is low. From the *Kambalina* to the *Ozernaya* is ſo mountainous and ſteep, that one cannot go near the ſea.

From the *Ozernaya* to the *Opala* it is likewiſe mountainous, but more upon a level.

From the *Opala* to the Great River is an extenſive plain, ſo that not one hill is to be obſerved near the ſea. After paſſing a great number of rivulets, all of which ariſe out of a range of mountains, called

called *Stanovoy* ridge, we come to the river *Geek*, called by the Coſſacks *Vorovſkaya*, or Rogue's River, becauſe the *Kamtſchadales* who live upon it were frequently concerned in inſurrections, and uſed to kill the tax-gatherers treacherouſly. From hence we meet nothing worth notice 'till we come to a *Kamtſchatkoi* fort, called *Tackauta*, in which travellers uſually equip themſelves for paſſing the ridge. Here the common road lies near a rivulet, from the head of which it paſſes the *Stanovoy* ridge, 'till it deſcends to the heads of the river *Keergena*, which falls into the *Kamtſchatka*. /103 /133

From the *Keergena* we paſs up the river *Kamtſchatka* to the *Kamtſchatkoi* fort. The country between the little fort *Tackauta* and the *Stanovoy* ridge is a deſert of 110 verſts in extent, and from the ridge to the upper *Kamtſchatkoi* fort is 65, the land equally barren. /133

The above road is very difficult and dangerous, for a great part of it lies on the river, which, from the rapidity of its current, in many places never freezes. Travellers are obliged, therefore, in ſome parts to keep cloſe to the ſides with great care; for if the ice breaks nothing can ſave them, the rocks on the banks in ſeveral places being ſo ſteep that it is impoſſible to get on ſhore, and the river runs ſo ſwiftly that you are immediately driven under the ice. The ridge is paſſable only in calm and fair weather, for which we are obliged to wait ſometimes ten days or more; at other times it is impoſſible to find the way, and we muſt inevitably fall down the precipices, and be loſt. The propereſt time to paſs is when no clouds are to be ſeen on the top of the ridge, for even the leaſt cloud is a ſign of a great ſtorm there. To croſs over this ridge takes up a whole winter's day. The greateſt danger is in paſſing over the very top, which is called by the Coſſacks, *Greben*, or a comb. Its breadth is 30 fathoms; it is like a boat with the bottom upwards, the aſcent on both ſides being very /133 /487

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 very ſteep. The paſſage is troubleſome even in the calmeſt weather,
487 for the road falling off leaves nothing but ice: the *Kamtſchadales*,
481 therefore, in order to paſs it in ſafety, have under their ſnow-ſhoes, two nails; yet theſe are of ſmall ſervice if the wind overtakes them there, for they are frequently carried from one ſide to the other to the great hazard of their lives, or at leaſt of their limbs. Beſides which, this paſſage is attended with the danger of being ſmothered in the ſnow, the narrow path lying between high, and almoſt perpendicular, mountains, from which the ſnow falls in heaps upon the leaſt motion. This is a danger, indeed, unavoidable in every place where the road lies in narrow and deep vallies.

In mounting the ridge all muſt walk, for the dogs can hardly aſcend it even with the light baggage; but in deſcending it is otherwiſe, for then they only leave a ſingle dog in the ſledge: the reſt are taken out, it being impoſſible to manage them all in ſuch a road. Although this paſſage of the ridge be ſo difficult, yet, as it is the uſual road to *Kamtſchatka*, one may conclude that any other paſſage from ſea to ſea muſt be ſtill more difficult and dangerous.

133 The coaſt from the mouth of the Great River to the river *Puſtaia*, as far as the *Shaback*, is ooze and ſoft mud, ſo that many veſſels have been thrown upon it without receiving any hurt. From the *Shaback* the ſhore begins to be bolder, though not rocky; but from the *Tulaban* river it is mountainous, rocky, and dangerous to ſeamen.

600 The late deſcriptions of the ſhore of the *Penſchinska* ſea, from the *Leſnaya* to the *Penſchina* and to the *Ochotska*, are more particular than the former: for in the year 1741 a high road was eſtabliſhed to *Kamtſchatka* with poſt-houſes at proper ſtations; yet, with regard to the diſtances of places, they are not much more accurate; ſince there were no aſtronomical obſervations

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact
131 number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*,
136 and extends in length from the north-eaſt to the ſouth-weſt
161 50 verſts, and in breadth about 30. This iſland is full of
651 mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way. 133 123 782 777

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh- 133 137 372 313 342 [101] 177 439

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177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

101 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and vo-
651 luntarily pay a tribute in beavers and foxes. The author concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

kind representations, of the clemency of her Imperial majesty, with promises that she would protect and defend them from their enemies. 65

Neither I nor Mr. *Steller* could have an oppportunity to inform ourselves particularly of the rest of the *Kurilski* islands; therefore we shall give the accounts of them that were communicated to me by Mr. *Muller*, which he had from the *Japanese*, who were shipwrecked upon the coasts of *Kamtschatka*. 133

Between Mr. *Muller*'s account and our's, there is some difference; for in his, *Onnecutan* is called the sixth island. However this might happen only on account of his reckoning the small islands also, which the *Kuriles* do not. According to his description, beyond the *Paromusir*, or the second *Kurilskoy* island, there are three more islands; *Sirinki* is reckoned the third; *Uyakoopa*, the fourth; and the *Kukumita*, or *Cucumiva*, the fifth; the *Sirinki* and *Kukumita* are smaller than *Uyakoopa*, which island is remarkable for a high mountain. The said islands are placed in a triangle; the *Uyakoopa* lying most north, and fartheſt weſt; and the *Sirinki*, with regard to the former, south-east, and in the same longitude with *Paromusir*; and the *Kukumita* a little farther southward than the *Uyakoopa*. It seems that these islands in the General *Russian* map are expressed under the names of *Diacon*, *St. Iliab*, and *Galanta*, which are placed in a triangle, though their situation is not exactly the same as in the above description. The sixth *Kurilskoy* island, according to Mr. *Muller*, is called *Muska* and *Onnecutan*. The seventh is *Araumakutan*, is uninhabited, and there are some burning mountains as in *Kamtschatka*. On the eighth island *Sujaskutan*, which is as large as the former, some few people inhabit who are not taxed. From this island to the west lies the ninth called *Emarka*; and thence on the south-west side is the tenth island *Mashachu*, which is small and uninhabited; and on the south-east side from the *Sujaskutan* there is a small island *Ebachu*, which is reckoned the eleventh.

The

/33 The twelfth island *Shockoeki* lies on the south side, and so distant from the *Sujaskutan*, that they can hardly row to it in half a day, even when the days are longest, in the lightest boat. It is said, that the *Japanese* carry ore from it in large vessels; but what ore is not known. The thirteenth island, and the following to the seventeenth, are called *Motogo*, *Shatovo*, *Utitir*, *Kituy*, and *Shimutir*. The *Utitir* lies somewhat to the east, and the rest in one line south. The channels are crossed in light boats, in less than half a day, but the passage is excessively difficult, because the tide runs very rapid in all of them; and, when it happens to be a side wind, these small vessels are driven into the sea, and lost; and for this reason the inhabitants of all these islands pass and repass these places early in the spring in calm weather. The *Motogo*, *Shatovo*, and the *Utitir* islands have nothing remarkable in them. On the island *Kituy* grow the
/61 reeds of which they make their arrows. The *Shimatir* is larger than the rest, and has many people on it, who resemble the *Kuriles* of the first three islands in all respects, but are not under the *Russian* government, nor any other foreign power. The navigators who were sent by *Peter the Great*, only saw this island, beyond which no *Russians* ever were until the second *Kamtschatkoi* expedition.

/33 The *Cheerpuy* is reckoned the eighteenth of the islands. It lies west at the mouth of the channel. On this is a very high mountain, but no inhabitants. Some people come there from the other islands to catch fowls and dig roots. The people of *Kituy* have sometimes heard firing of cannon on this island, as they relate, but on what account they know not. They likewise report, that formerly a *Japanese* vessel was lost upon it, whose people were taken by the inhabitants of the next island, and were sent to *Japan* to be redeemed.

000 The channel which divides the island *Shimutir* from the nineteenth island *Eturpu* is so broad, that one cannot see one island

other places, and the ſecond by boiling ſea water into ſalt; but the troubleſome diſtant carriage of the iron, and the boiling of the ſalt, are attended with ſuch expence and difficulty, that they are both ſold at a moſt intolerable price. One cannot buy a common ax under two rubles, and a pound of ſalt coſts four rubles.

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS.

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *.

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſhin, which contains 27 inches.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 731 After this, in *Awatscha* and the islands near the *Kurilskaya Lopatka* they felt a terrible earthquake and motion of the waters, which was observed in the following manner. The earthquake began about three o'clock in the morning the 6th of *October*, 1737, and continued about a quarter of an hour, and many of the *Kamtschatkoi* huts and tents were overturned. At the same time the sea was driven upon the shore, and rose about 20 feet; immediately after all the water was carried back to a great distance from the shore, and then it returned again higher than before, and afterwards retired so far that one could not see it from the shore. At that time, in the passage between the first and second of the *Kurilski* islands, they observed clusters of rocks in the bottom of the sea that had never been seen before, although they formerly had great earthquakes and extraordinary agitations of the sea. A quarter of an hour after this the earthquake returned with most terrible waves, and the sea overflowed the shore 200 feet high, which, as formerly, immediately retired. This rolling motion continued for a long time, the sea frequently approaching the shore and departing from it. Before every earthquake a great, heavy, rumbling noise was heard from this overflowing of the sea. The inhabitants were all ruined, and many of them miserably lost their lives. In several places the meadows, little hills, and fields, were turned into salt-water lakes. This was not so violent upon the *Penschinska* sea as upon the Eastern Ocean; and the people about the Great River suffered very little.

At this time we sailed from *Ochotska* to the mouth of the Great River; and when we came on shore the 14th of *October*, the earthquake was still perceptible, which was sometimes so strong that we could not stand upon our feet; and this continued to the spring of the year 1738: however, it was more upon the *Kurilskaya Lopatka* and the coast of the Eastern Ocean than in those places that were more remote from the sea.

The

The Coſſacks of the great river, who were then upon the *Kurilſki* iſlands, told me, that upon the beginning of the earthquake they ran with the natives up to the tops of the mountains, and left all their goods, which were deſtroyed, as well as the habitations of the *Kuriles*.

The *Tulbatchinſky* mountain ſtands upon that neck of land which lies between the rivers *Kamtſchatka* and *Tulbatchik*: it has ſmoked for many years. In the beginning of the year 1739, for the firſt time, it threw out a ball of fire which ſet the woods on fire. After this fire-ball aroſe a thick cloud, which increaſing gradually at laſt fell down and covered the ſnow 50 verſts round with aſhes. I was going at this very time from the upper to the lower *Kamtſchatkoi* fort, and was obliged to wait a new fall of ſnow, as we could not travel upon this ſooty matter.

Nothing extraordinary happened upon this conflagration, except ſome ſmall ſhocks of an earthquake, which were felt both before and after. The great ſhock was about the middle of *December*, which I felt when I went to the upper *Kamtſchatkoi* fort from the Great River. We were then not far from the *Hrepta*, or *Ogulminſky* ridge. When we ſtopped about noon, the diſmal ſound in the woods that we heard at firſt ſeemed as an approaching ſtorm; but our kettles being thrown from the fire, and we ourſelves rocked in our ſledges, we were ſoon convinced of our miſtake. This earthquake had only three vibrations, which ſucceeded each other at about a minute's diſtance.

The mountain of *Kamtſchatka* is higher, not only than the two laſt mentioned, but than any other mountain in that part. Two thirds of its height are made up of rows of hills, as I mentioned, of the *Awachinſky*; the *Shatſe*, or top, making alone one third of its height. The circuit round the bottom of the mountain is near 300 verſts. The *Shatſe*, or top, is very ſteep on every ſide, and has ſeveral deep openings lengthways: the very ſummit

turns

133 turns gradually breadeſt from the falling in of the earth into the mouth of the burning gulph. It is ſo high, that in a clear day it is to be ſeen from the upper *Kamtſchatkoi* fort, which is about 300 verſts; and one cannot ſee other mountains, the *Tulbatchinſky* for inſtance, although they are much nearer. Before a ſtorm the ſummit appears ſurrounded with three girdles; the higheſt ſeems in breadth about the fourth part of the height of the mountain, from whence ariſes a continual thick ſmoke. The inhabitants ſay, that it throws out aſhes twice or thrice yearly, and ſometimes in ſuch quantities, that for 300 verſts around the earth is covered with them the depth of a verſhoke. From the year 1727 to 1731 the inhabitants obſerved that it burnt almoſt without interruption, but they were not under ſuch apprehenſions as in the laſt conflagration in the year 1737. This terrible conflagration begun the 25th of *September*, and laſted one week with ſuch violence, that to the people who were fiſhing at ſea near the mountain it appeared one red-hot rock, and the flames, which burſt through ſeveral openings, ſometimes ſhewed like rivers of fire with a ſhocking noiſe. Within the mountain were heard thunderings, crackling and blowing like the ſtrongeſt bellows, which ſhook all the neighbouring country: the nights were the moſt terrible. This conflagration ended as uſual, with throwing out a vaſt quantity of cinders and aſhes, of which however little fell upon the land, the whole cloud being almoſt carried by the wind to the ſea. It throws out porous ſtones and glaſs of different colours, which are frequently found in the brook *Boukoſſe*, which riſes out of this mountain. The 23d of *October* following at the lower *Kamtſchatkoi* fort happened ſuch a violent earthquake, that moſt of the houſes and ſtoves were thrown down, the bells of the churches rang, and the new church, which was built of thick balks of larch wood, was ſo much ſhaken that the joinings of the balks were all looſened. Some ſhocks were felt at times until the ſpring of the year 1738; however

however the agitation of the waters was leſs than what had been formerly obſerved. The earthquakes are ſaid to be more violent near a mountain that burns, than near one that has left off burning, or is not quite kindled. 133

Beſides theſe mountains, I heard of two other gulphs where ſmoke ariſes: one is called *Joupanoſky*; the other, *Shevelitche*; but there are ſeveral places farther north than the river *Kamtſchatka*: ſome of which emit ſmoke, and ſome fire: and there are in the *Kurilſki* iſlands, one upon the *Paromuſir*, and another upon the *Alaide*; concerning which Mr. *Steller* obſerves, that it is only one hill which burns, not a whole ridge; all theſe mountains have outwardly the ſame appearance, and it is, therefore, probable that their contents are much the ſame; that from the external appearance, one may judge of their internal contents, and of their aptneſs to take fire and burn; and that in all theſe which have ſmoked or burned formerly, but have been extinguiſhed, lakes are always found; whence he concludes, that as theſe were burnt down to the bottom, the waters ruſhing through the opened paſſages, filled the empty ſpace; and hence an account may alſo be given of the cauſe of the hot ſprings.

There are two hills which have left off burning; the *Apalſky*, out of which riſes the river *Apala*; and the *Biloutchinſky*, from which comes the river *Biloutchik*. At the bottom of this hill is a lake, where vaſt numbers of herrings are caught in the months of *March*, *April*, and *May*. 136

CHAP.

CHAP. III.

Of the HOT SPRINGS.

133 I Found the following hot ſprings: 1ſt, Upon the river *Oſernoi*, which runs out of the *Kurilſkoy* lake. 2d, Upon the river *Paudche*, which falls into the *Oſernoi*. 3d, Upon the river *Baano*, which is reckoned a branch of the Great River. 4th, Near the fort *Natchikute*. 5th, Near the mouth of the river *Shematchinſki*. 6th, Near the head of the ſame.

Theſe waters, which are upon the river *Oſernoi*, run in little ſprings from the ſouth bank; ſome fall directly into the river: others keep their courſe parallel to the river, and, joining after at ſome diſtance, fall together into the *Oſernoi*. Theſe ſprings are not conſiderable, nor very hot, only raiſing the thermometer (*Farenheit's*) which in the open air was at 45° to 145°.

The ſprings upon the *Paudche* are four verſts and a half diſtant from the firſt, and riſe out of the ground, upon the eaſt bank of the river in an open high hill which has a plain at the ſummit of 350 fathoms * in length, and 300 in breadth. This hill goes in a promontory towards the river, where it makes a a ſteep bank; but on the other ſide the deſcent is eaſy.

Several of theſe ſprings throw out their waters, like artificial water-works, about a foot, or a foot and a half, high, and with a great noiſe. Some of them ſtand in large pools like little lakes, and ſend out ſmall ſtreams, which, joining upon the plain, divide it, as it were, into ſo many iſlands, and at laſt fall in a conſiderable ſtream into the *Paudche*. That little lake marked by the letter ⌐ is remarkable for having an opening two fathoms deep.

* The *Ruſſian* fathom is ſeven feet.

In

In the iſland are a great many openings, ſome very ſmall, and others above a foot diameter; but from theſe large openings iſſues no water, though the ſmall ones ſend out ſometimes water and ſometimes vapour with a very great force. /33

All thoſe places from which formerly iſſued out water, may be known by a various coloured clay which is found round them, for this clay is commonly thrown up by the waters. Sulphur is alſo found there, eſpecially about thoſe openings which emit vapours only.

Some ſprings likewiſe flow from that ſteep bank which we mentioned, two fathoms or more higher than the river. It is remarkable, that the ſtones of which this bank, and perhaps all the hill, is formed, are round, outwardly very dry, but within ſo ſoft that they may be rubbed between the fingers like clay: hence it has been conjectured, that the various coloured clay, which is found about the mouths of the ſprings, is nothing but theſe ſtones ſoftened by the moiſture and heat. The clay in taſte is ſour and aſtringent; and if a piece of it, or a ſtone, is broken, there appears an efflioreſcence of alum, like a moſs, with the colours blue, white, red, yellow, green, and black, which are ſo mixed as to reſemble marble; and when the clay is not quite dry, the colours are pretty bright.

Oppoſite to the promontory of the hill is an iſland in the river *Paudche*, where there are likewiſe ſprings of hot water, but ſmaller than thoſe before mentioned.

A more diſtinct idea may be had of theſe hot ſprings from the ſubjoined plan, in which each ſpring is marked with a particular letter, with the different degrees of heat.

133 *A* TABLE *of the different degrees of heat which were found in each spring, by* De l'Isle's *and* Farenheit's *thermometers.*

	De l'Isle's	*Farenheit's*
The lake at the head of the ſtream ⌈	80	116
The eye which is in the corner of that lake	65	134
The little lake into which the ſtream ⌈ falls	115	74
The ſpring out of which the ſtream 1 runs	50	152
The mouth of that ſtream where it falls into the lake —— —	106	87
The mouth of the ſtream E where it comes out of the lake —— —	95	98
The ſpring of the ſtream 2 —— —	20	188
The little lake at the head of the ſtream 3	60	140
In the ſame lake at the mouth of the ſtream 3 —— —— —	80	116
Where this ſtream joins the ſtream 2 —	93	108
At the head of the ſtream N —	10	200
The mouth of this ſtream —— —	55	146
The head of the ſtream K —— —	80	116
Where this ſtream joins the ſtream N	95	98
Where both theſe ſtreams fall into the *Paudche* —— — —	110	80

De l'Iſle's thermometer ſtood at this time, in the open air, at 136°, and that of *Farenheit*'s at 49°.

The ſprings which are upon the river *Piaana* are not very different from thoſe of *Paudche*. They riſe upon both ſides of the river; and as upon the ſouth bank there is a high plain, and upon the north a cliff of rocks, the ſprings on the ſouth bank fall into the river in little ſtreams; but thoſe upon the north ſide run along the cliff, except one which riſes about 80 fathoms from the reſt, and where the cliff is more diſtant from the river, which has a courſe of 40 fathoms.

Amongſt

Amongſt the ſprings upon the ſouth bank it is to be remarked, 133 that one place is full of openings of very different diameters, where the water is thrown up two feet and a half with a great noiſe. The thermometer, which in the open air ſtood at 185 degrees, roſe to 15 degrees.

The ſprings of the Great River fall into it in one conſiderable ſtream, which runs between ſtony hills in a narrow channel. The banks are boggy, and the bottom ſtony, covered with moſs. From its ſpring to the place where it falls into the Great River is 261 fathoms. At the ſpring the mercury roſe in *De l' Iſle*'s thermometer to 23, and *Farenheit*'s to 185, degrees; thence to where it falls into the River it grew cooler gradually, ſo that at the mouth *De l' Iſle*'s thermometer only roſe to 115, and *Farenheit*'s to 74, degrees; in the open air the one ſtood at 175, and the other at 14, degrees.

The hot brook, that is near the river *Shematche*, and falls into the Eaſtern Ocean, is much larger than any of the above-mentioned. At its mouth it is three fathoms broad, and in ſome places near four feet deep, and its length is three verſts * and 88 fathoms. It runs between high ſtony hills with a ſtrong current: its bottom is a hard ſtone covered with green moſs, which in ſtill places ſwims upon the ſurface. Near the banks at its mouth, the heat is like that of ſummer water; and towards the head the graſs and plants upon the banks were green and ſome of them flowered in *March*. In going from this river to the laſt hot ſpring that lies upon the river *Shematche* one muſt paſs a great ridge of hills. Upon the eaſt ſide of this ridge, near the ſummit, is an even plain covered with round grey ſtones, without any plants growing upon it. Upon this plain in ſeveral places a vapour aſcends with great force, and a noiſe reſembling the

* A *Ruſſian* verſt is 500 fathoms, or 3500 feet.

133 bubbling of water is heard. Here I dug, expecting to find water; but I found a ſtratum of ſuch hard ſtone that we could not dig through it. It is probable that the waters of the warm brook, that falls into the Eaſtern Ocean, have their origin from this place, for it is directly oppoſite to the riſe of that brook: and the laſt ſtream that falls into the river *Shematche* is likewiſe thought to derive its ſource from the ſame place, as it riſes from this ridge, upon the weſt ſide, in a deep hollow, ſurrounded with ſmoking hills. The very bottom itſelf is full of boiling ſprings for near a verſt and a half; all which join at laſt in one ſtream.

In this bottom are two large wells, that deſerve particular notice; one is five, the other three fathoms' diameter; the firſt one and a half, the other one fathom deep. In theſe the water boils up with white bubbles, and makes ſuch a noiſe, that one perſon cannot hear another in the common way of ſpeaking; nay, ſcarcely when he cries aloud. The vapour is ſo thick, that one cannot ſee a man at ſeven fathoms' diſtance; and the boiling of the water is only to be obſerved by lying down upon the ground. The earth between theſe wells yields like a bog, ſo that one is in continual fear of ſinking in. The water of theſe ſprings is diſtinguiſhed from all others by a black matter, like *Chineſe* ink, that ſwims upon the top, which ſticks ſo to the fingers that one cannot without difficulty waſh it off. They have, in common with other hot ſprings, clay, lime, alum, and ſulphur, of various colours. In all the above-mentioned ſprings the water is thick, and ſtinks like rotten eggs.

823 The *Kamtſchadales* eſteem all the burning mountains, and
778 places where hot ſprings ariſe, as the habitations of ſpirits, and approach them with fear; but, as the latter are the moſt dangerous, they are under the greateſt awe of them; and therefore they never willingly diſcover them to any *Ruſſian*, leſt they ſhould be obliged to accompany him near them. It was by chance that I heard of them after I had travelled 100 verſts from the

the place; but this natural phænomenon appeared ſo curious that 228
I returned to examine it. The people of *Shematchinſki* village 823
were obliged to declare the true reaſon why they had not formerly diſcovered them, and much againſt their will were forced to ſhew me the place, but would not go near it: and when they ſaw that we lay in the water, drank it, and eat things boiled with it, they expected to ſee us periſh immediately; but when they ſaw this did not happen, they told it in the village as an uncommon wonder, and were aſſured that we muſt be very extraordinary people ſince even the devils could not hurt us.

This is remarkable, that north from the mouth of the river 133
Kamtſchatka, and weſt along the coaſt of the river *Oſernoi*, there are no hot ſprings, although it abounds in *Pyrites*, ſulphur, iron ore, and ſtones that yield alum and vitriol. Mr. *Steller* obſerves, that the appearance of the country of *Kamtſchatka*, and the frequent earthquakes there, give reaſon to think that it is full of caverns replete with combuſtible matter, which taking fire in the bowels of the earth produces earthquakes, and makes thoſe vaſt alterations of which we ſee numerous inſtances in rocky ſhores being torn off both upon the *Beaver* ſea, and in the iſlands which lie between *Aſia* and *America*. The combuſtible matter, he tells us, is kindled by the ruſhing of the ſalt water into thoſe ſubterraneous caverns, through their apertures towards the ſea; which hypotheſis is ſtrengthened by his obſervation that the earthquakes are moſt frequent about the equinoxes, when the waves of the ſea are driven by the great ſtorms with uncommon violence upon the ſhores; and eſpecially about the ſpring equinox, at which time the water always riſes higher than at any other: and the inhabitants of *Kamtſchatka* 823
and the *Kuriles* know this ſo well, that they always fear the beginning of *March* and the end of *September*.

It is very extraordinary, that no iron has been diſcovered here, 135
although ſome ore is obſerved mixed with clay and earth, to which

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133/135 which ſulphur being added the ſubterraneous fires may eaſily be accounted for; nor do we yet know of any ſalt ſprings, although the narrowneſs of the iſthmus of the peninſula of *Kamtſchatka*, and ſo many ſubterraneous caverns under the rocky hills which have communication with the ſea, ſhould give us reaſon to conclude that there muſt be ſome.

After the hot ſprings we ought to take notice of the rivers which never freeze. Theſe are ſo common in *Kamtſchatka*, that there is ſcarcely one river which has not ſome very large openings, even in the moſt ſevere froſts; and the plains under the hills are ſo full of ſprings that one cannot go dry any where in the ſummer. Theſe ſprings, which joining make a little rivulet, and fall into the *Kleutchova Kamtſchatka*, never freeze, and yield fiſh almoſt the whole winter, which gives an advantage to the *Kleutchova*, as it furniſhes not only the *Kamtſchadales*, but all the people of the *Oſtrog* of *Niſhniſhantalſky*, with freſh fiſh, which is generally eſteemed, on account of its ſcarcity at that time, as a very great delicacy. This may alſo account for the wholeſomeneſs of all theſe waters, which the inhabitants drink after eating the fatteſt fiſh without the leaſt harm, although, in other places, cold water drunk upon fat fiſh produces the bloody flux.

CHAP.

Nothing plagues the natives in their huts ſo much as the lice and fleas; the women ſuffer moſt from the former, by wearing very long, and ſometimes falſe hair. Mr. *Steller* was told, that near the ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them. 136 515 302

It is remarkable that in *Kamtſchatka* there are neither frogs, toads, nor ſerpents. Lizards, indeed, are numerous enough, which the natives look upon as ſpies ſent from the infernal powers for information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others. 136 825 787

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

133 do not happen at fixed times, but according to the age of the moon, as I obſerved in the *Penſchinſka* ſea; and if this general opinion be true, that the ebbs and floods in other ſeas are equal, and at fixed hours, then the *Kamtſchatkoi* ſea reſembles only the White Sea, where I am told that there is one high ſpring and one low flood in the ſame day. The laſt the natives call *maniha*; therefore I thought it proper carefully to relate the difference of the tides here, both with regard to the high water and the maniha: for the better underſtanding of which in the original is ſubjoined a long journal, which was kept for three months, and likewiſe the journal of Captain *Elagine*, which was taken at the mouth of the river *Ochotſka*, the *Kuriſki* iſlands, and the haven of *Petropaulauſkay*; which we omit, as it would only be a uſeleſs burthen to the *Engliſh* reader.

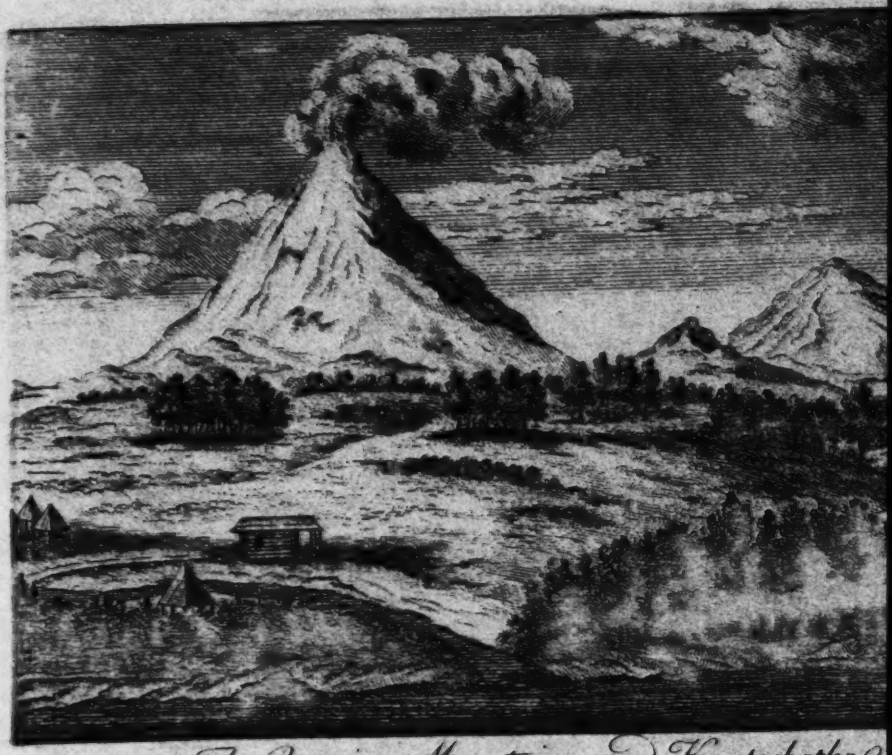
Now, in order to be the more intelligible, I muſt obſerve, that the ſea water which flows into the bays does not always run intirely back, but only according to the age of the moon; ſo that ſometimes in the time of ebb nothing remains but the water of the river which is within its own banks, at other times theſe banks are all overflowed with water. All the ſea water runs out about the full and new moon, when the flood follows immediately upon the ebb, and it riſes near eight feet. The flood continues about eight hours, and then it begins to ebb, which continues ſix hours; after which it flows again for three hours, the water not riſing quite a foot; at laſt the ebb begins, which continues ſeven hours, and all the ſea water runs out In this manner are the floods and ebbs regulated for three days after the full and new moon; at the end of which the time of the flowing and ebbing, and height of the flood and ebb, is leſs, the maniha greater, the ſea water which was before ſaid to run all out now remains in ſome part, and as the moon approaches the quadratures, the large tides grow leſs and the maniha greater; ſo that after the ebb of the maniha the greater quantity of water remains ſtill in the bays, and at laſt, at

at the quarter moons, what were the high tides change into the maniha, and the maniha into them. I reckon the change of the high tide into the maniha, and of the maniha into the high tide, from the time when one tide begins at midday and the other at midnight; or when it begins to flow or ebb at ſix hours in the morning and ſix in the afternoon. 133

I ſhall likewiſe communicate the methods that I followed in my obſervations: In the mouth of a river I placed a ſtake, divided into feet and inches of the *Paris* meaſure; the loweſt mark was at the height of the river water in the time of the ebb at the new and full moon. This ſtake I fixed without great trouble, but am obliged to own that I was not able to aſcertain exactly the height of the water in the flood, becauſe it always comes in ſurges, which renders the ſtake wet ſomewhat higher than the true depth; nor can I certainly determine whether the water continues at the ſame height, or not, for any certain time.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchada

133



The Burning Mountain named Kamtschatka

361
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177
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The Lower Kamtschatka Fort.—
Facing P. 265

CHAPTER III

THE COUNTRY AND SOMATOLOGY OF THE KAMCHADAL

GEOLOGICAL PAST OF KAMCHATKA

● 153 Professor Obruchev[1] says that at the end of the Miocene Epoch the western shore of Kamchatka was sinking, and Professor Bogdanovich[2] supposes that during 172 the Pliocene Epoch a considerable part of the present western and eastern shores of the peninsula were still covered with water. The beginning of the Quaternary, says Obruchev, evidently formed a continental phase which set in after the sinking phase of the Mio-Pliocene Epochs; the land in Siberia reached its maximum extension; the Bering Strait did not exist as yet, and the Chukchee Peninsula was connected with Alaska, and therefore the northeast of Siberia must have had a milder climate than at present. But all these are geological periods which preceded the appearance of man.

The Pleistocene Epoch, which is associated with the existence of man, may be proved in the valley of the Kamchatka River, according to Bogdanovich, by the frequent occurrence of remains of the mammoth and the *Bison priscus*. But nothing is said about the remains of man. In many places of Siberia man was contemporaneous with the mammoth, but there is a question whether the same was true in Kamchatka. About the end of the Pleistocene Epoch, says Bogdanovich, there was an extensive glaciation in many places of Kamchatka.

These climatic changes do not interfere with our theory of the migration to America of the Siberian-Americanoid tribes, including the Kamchadal, in one of the Interglacial Epochs, and of their remigration to northeastern Siberia after it was released from the ice.

But especially on the Kamchatka Peninsula must it be noted that our theoretical considerations are proved by archæological evidence.[3] No artifacts of the palæolithic man were discovered by the author on Kamchatka, and it is possible that no man lived during the old stone age on the Kamchatka Peninsula. It remains, however, for the future to prove or disprove it. In order to clear up my doubts in this respect I communicated with my friend the Russian geologist, Professor I. P. Tolmachoff, now curator of the Department of Invertebrate Palæontology of the Carnegie Museum, Pittsburgh, Pennsylvania. He is well known by his explorations in northeastern Siberia. He writes that it is hardly proper to conclude that man lived in the Kamchatka River valley in the Pleistocene Epoch on the only ground that remains of mammoth and *Bison priscus* were found there. Mammoth and man very often were neighbors but, as it seems, this dependence

[1] W. A. Obruchev, *Geologie von Siberien*, Berlin, 1926.
[2] Karl Bogdanovich, *Geologische Skizze von Kamtschatka*, Petermann's Mitteilungen, Band 50, 1904, pp. 66, 196, 217.
[3] Waldemar Jochelson, *Archæological Investigations in the Aleutian Islands*, Pub. No. 367, Carnegie Inst. Wash., 1925. *Idem, The Ethnological Problems of Bering Sea*, Natural History, Jour. Amer. Mus., Jan.–Feb., 1926, vol. xxvi, No. 1, pp. 90–95.

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
122 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the paleolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no paleolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnöye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and salteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 200 Japanese prisoners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer

000 consisted of myself, Mrs. Jochelson as assistant and physician to the party, and eleven laborers, of whom seven were Russians, three Kamchadals and one Japanese.

●133 The Osernaya River, with its slanting bed, rocky banks, rapid falls and curves, forms a most difficult and dangerous route of travel. We had two boats and two canoes. One of the boats was for Mrs. Jochelson and myself; the other carried the tents, instruments, food and other supplies. The canoes served for reconnaissance and errands requiring despatch. It was very difficult to make progress on the turbulent river, particularly on the way up. Several times we had to disembark and carry our freight on our shoulders, while the boats were pulled by ropes through the rapids. (See Plate 5, figs. B, C.)

196 While there are no human habitations anywhere in the country, we were amazed to find well-beaten paths in the forests and on the mountains above the river, as if there were numerous human settlements. But realizing that these were roadways made by bears, we walked cautiously amid the dense vegetation with rifles ready for action. We did not see any bears while following these paths, but we heard the breaking and cracking of bushes and tree branches, and on the ground we found pieces of fresh salmon, the remnants of the bears' meals. The animals are very nervous and easily become alarmed. They have sufficient reason to be afraid of a man with a gun.

It is well known that at Lake Kuril and in its vicinity scores of bears are to be found. The abundance of fish and of many kinds of berries furnishes them ample food and favors their increase in number. The sparsity of human population is also favorable to the multiplication of the bears, although the few hunters of the coastal villages annually kill them by the hundreds.

133 After five days of painful effort we finally reached our destination. It was a windy day and our frail boats nearly capsized on the stormy lake, which is sur-
515 rounded by the peaks of extinct volcanoes and by steaming hot sulphurous springs,
757 the temperature of which reaches 100° C. (210° F.) and more. From our boat we observed steaming springs on the banks of the Osernaya when nearing the lake, but we had no time to stop to investigate them. We were told that the Kamchadal from Yavino and the Russians from Osernaya dig pits by the hot springs for bathing and curing different diseases. The temperature in these baths is reduced to 50° or 40° C.

136 From the head of the Osernaya River I directed my fleet to the Siwusk Cape (see map of Kuril Lake and Plate 5, fig. a). While excavating there we were entertained every day by the sight of bears fishing and gathering berries, particularly when we increased our field of observation by the use of opera glasses. The bears stood with their hind legs in the mountain rivers and creeks, and with their front paws managed to throw out on the banks the sea salmon, which in order to spawn ascend the rivulets that flow into the lake. The bears went after their prey and eating off the heads and spines, which are the most palatable parts of the fish, cast away the remainder. Their movements, turning, leaping and jumping, were so amusing that we could not restrain our laughter.

000 My laborers were anxious to hunt bears, but I could not allow them to go on such an undertaking as the time was short and a Government steamer was expected on a certain date at the mouth of the Osernaya River to take my party to Petropavlovsk. However, I once allowed two of them to go for a night hunt and they secured a little bear cub. They cooked and ate the meat.

On the morning of our contemplated departure from Lake Kuril, when all the specimens found in the excavations had been packed, the lids of the boxes nailed down and the boats loaded, I was tempted to linger just a little longer upon seeing two she-bears playing with their cubs on the other side of a pond in the rear of the promontory. I accordingly delayed my departure until the afternoon, and singling out two of the best marksmen from my party, and equipped with a stereoscopic camera and a motion-picture camera, I started in the direction of the bears. We had to undress in order to cross the Etamenk River in the rear of the promontory, and to carry on our heads the bundles of clothing, the rifles and the cameras, so that they might not get wet. We reached the other bank of the river, dressed ourselves, and tried to pass as noiselessly as possible through the little jungle which led up to the open meadow where the she-bears were playing with their cubs.

We stopped on the outskirts of the forest and put up the cinema and stereoscopic cameras. As the bears were still too far away, I told one of my two men to make a circuit about them and frighten them from the rear so that they might come nearer to us. Both cameras were in readiness to take pictures, when suddenly at a distance of about thirty yards appeared a young black bear quietly passing by. I quickly took a stereoscopic snapshot and was about to start with my cinema, but the bear became frightened by the clatter of the falling shutter of the photographic camera and, instead of running away, rushed in our direction. We had no choice but to aim at his head and fire as he neared the camera.

After ascertaining that the bear was dead, we looked around. None of the other bears were to be seen; they had been frightened by the shooting and had disappeared. As I could not remain on the lake any longer, I had to give up the idea of another attempt to approach bears with peaceful intent. The bear that was killed appeared to be not more than three or four years old. I took the skin and the meat of a hind leg for the laborers.

We returned to our camp late in the day and were compelled to spend one more night on the promontory. Next morning, our archæological mission fulfilled, we started our journey to the sea.

172 The proceedings and results of the excavations were as follows: I selected for digging the ancient village site on a cape or rather a small peninsula in the south-
● 133 western part of the lake. The Kamchadal call this cape Siwusk (see map of the
136 lake). The village was located on the rocky extremity of the cape and on its slope near the small inner lake. The extremity of the cape rises over the lake about 16 meters. The sides of the inner lake which join the cape with the mainland are about six feet wide. From both sides of the cape two small mountain rivers empty into the lake.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

 133 172

rivers empty into the lake. They are rich in migrating salmon, which ascend the Osernaya River from the Okhotsk Sea to the lake for spawning in dense masses and attract numerous bears roaming the country.

Eighteen pits were dug—15 on the rocky hill and 3 below, where our tents are to be seen on Plate 5, figure 1. The general depth of the culture layers was about 3 feet. The pits under the hill were larger and seemed to be more ancient than those on the hill. No iron objects were found, but they yielded numerous pottery fragments, with handles inside, but no ornamentation. The pits were located mostly on the eastern slope of the hill, over a steep standing rock, and the outer margins of the pits seemed to have fallen down. The angles of the pits were somewhat smoothed; originally, however, the pits seemed to be quadrangular in shape, with the sides from 24 to 30 feet long. On the top of the cape was one pit of larger dimensions, probably that of a communal house for gatherings and festivals; this pit yielded a small quantity of objects; the greatest number of artifacts were furnished by the smaller pits. The following artifacts were found in the pits of the Kuril site:

(1) Nine arrow points (2959–2967) of quartzite and flint, the longest being 141 mm. (Plate 6, A).

(2) Twenty obsidian arrow points (2968–2987) (Plate 6, B). The greatest length was 80 mm. and the smallest 18 mm.

(3) Seventeen stone knives and other implements (2988–3004). The largest implement was 72 mm. in length (Plate 7, figs. 1–17).

(4) Twelve stone scrapers (3005–3016); the largest was 93 mm. in length (Plate 7, figs. 18–29).

(5) Twelve stone scrapers and other implements (3017–3028), the greatest length being 97 mm. (Plate 8, figs. 1–12).

(6) Eleven stone implements (3029–3039), some of them not finished. The greatest length was 100 mm. (Plate 8, figs. 13–23).

(7) Fragments of stone implements (3040).

(8) Forty-nine stone scrapers (3041–3089).

(9) Thirteen bone awls (3090–3102) Plate 12, figs. 1–13).

(10) Thirteen bone arrow heads (3103–3115) (Plate 12, figs. 14–26).

(11) Eight bone ornaments and other objects (3116–3123).

(12) Five bone implements (3124–3128) (Plate 13, figs. A).

(13) Fragments of bone implements (3129).

(14) Six fragments of bone implements (3130–3135) (Plate 13, fig. B).

(15) Four stone lamps (3136–3139) (Plate 14, figs. 4–7).

(16) Three stone lamps (3140–3142) (Plate 14, figs. 1–3).

(17) Three stone lamps (3143–3145) (Plate 14, figs. 4–6).

(18) Remnants of weaving (3151–3152).

(19) Pottery fragments of different pits (3153).

(20) A pottery fragment; the whole height of a pot (3154).

(21) A stone lamp; the first stage of manufacture (3157).

(22) Figure 66. A stone lamp of andesitic lava in process of manufacture (3158), 4/9 natural size.

(23) A pottery fragment from Pallan. A gift from the Governor of Kamchatka (3159).

(24) Three stone lamps (3165–3167) (Plate 15, figs. 1–3).

(25) Five stone lamps (3160–3164) (Plate 15, figs. 4–8).

(26) Seven stone axes (3168–3174). The largest is 197 mm. long (Plate 9, figs. 1–7).

(27) Twelve stone axes (3175–3186). The greatest length is 152 mm. (Plate 9, figs. 8–19). One of these specimens is illustrated in the text-figure 59 (3183). It is a rudely chipped adze of quartz schist, with a blade polished on both sides. Length, 122 mm.; greatest width, 25 mm.

(28) Four stone sinkers (3187–3190) (Plate 10, figs. 1–4).

(29) A stone sinker (3191) (Plate 10, fig. 7).

(30) Two stone sinkers with holes (3192, 3193) (Plate 10, figs. 5, 6).

172 (62) Not finished blade, evidently intended to be subsequently elaborated into an implement of a specialized type. It might also serve as a scraper. Of greatly silicified slate. Length, 98 mm.; greatest width, 50 mm.; greatest thickness, 28 mm. (3029). Text-figure 57.

(63) A scraper of dark gray flint; one side is flat with some chippings from one edge; the other side is regularly convex with broad chippings. The working edge is rounded. Length, 41 mm.; greatest width, 28 mm.; thickness 9 mm. (3075). Text-figure 58.

(64) A stone lamp of sandstone with an ear for tying it to the sledge or canoe when traveling or hunting. 4/9 natural size (3146). Text-figure 64.

(65) A stone lamp for the dwelling, of porphyrite, 1/3 natural size (3141). Text-figure 65.

● 133 As stated above, we left the Kuril Lake on August 16—a quiet calm day. We crossed the lake, on the right being the rocky almost triangular Alaid Island, 823 where millions of birds were crying and rioting. The Japanese writer R. Torii[1] refers to a Kurilian tradition, according to which in ancient times a high mountain rose where we have now the Kuril Lake. It was a handsome lady, and the neighboring summits, jealous of her, made her life unbearable by mockery and sneering, so she decided to leave Kamchatka and settled in the open sea. This became a small rocky island, Alaid (in Aino, Chachakotan), located to the northwest of the Paramushiri Island, and Kuril Lake formed in the cavity. Baron Dittmar refers to another variant of the Kamchadal tradition concerning the origin of the Kuril Lake. There was formerly a volcanic summit Alaid, which disliked its location and wandered over to the sea. In the cavity left by the mountain, the Kuril Lake originated. The mountain, however, left a piece of rock in the middle of the lake which the Kamchadal call Heart-Rock or Navel-Rock. Kuril Lake, according to Dittmar, is the second greatest lake of Kamchatka, Kronotzkoye Lake being larger.[2] Geologists explain the origin of the Kuril Lake by the sinking of an old crater. The lake now lies 200 meters above sea-level and its depth in some places reaches 300 meters.[3]

000 The trip back to the seashore took us less than a day. Our boats were speeding and leaping over the rocks of the stony bed of the Osernaya River so that we had to use poles as brakes in order not to be overturned, particularly on the dangerous curves. Hunters, who come in spring on dog sledges to the Kuril Lake to kill bears, make quite primitive boats of twig-frames covered with bear skins in order to transport skins to the mouth of the Osernaya River. These skin-boats easily glide over the rocky rapids.

As I feared, the Government steamer had left for Petropavlovsk a day before we reached the shore. It did not stop at Osernaya, passing from the western strait to Petropavlovsk through the Kuril Strait. The fall storms had begun in the Okhotsk Sea and it was dangerous for the steamer to approach the coast, which has no harbor. We might have had to remain in Osernaya for the winter if it had not been for the administrators of the saltery and cannery, who were waiting for a special steamer before closing the plants. They had already sent off on a freight steamer the imported laborers and salted and canned goods. On the next day the

[1] Torii, *Études Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science, Imperial University of Tokyo, vol. XLIII, Tokyo, 1919–1921, p. 30.

[2] Carl von Dittmar, *Travels and Sojourn in Kamchatka in 1851–1855*, Part I, St. Petersburg, 1901, p. 654 (in Russian).

[3] See *The Kamchatka Expedition of F. P. Richtchinsky*, Zoological Division, Part I; P. J. Schmidt, Moscow, 1916. *The Investigations of the Zoological Division in Kamchatka in 1908–1909*, Chapter XII, written by Dr. A. N. Dershavin, one of Professor Schmidt's assistants.

[P.9L]

● 133

JOCHELSON PLATE 3

A

B

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C

A. Two boats bridged in order to carry author's party across the Avacha River.
B. The same bridged boats carrying the author's cart to a small island and from there across the Avacha River to the village Shrenka. The horses are forced to swim across. The river is not deep and the laborers are punting the boats with long poles.
C. Three bridged boats carrying the author's party and laborers from the mouth of the Tigil River to its tributary, the Kulki River. The laborers are punting the raft along the bank.

[p. 93]

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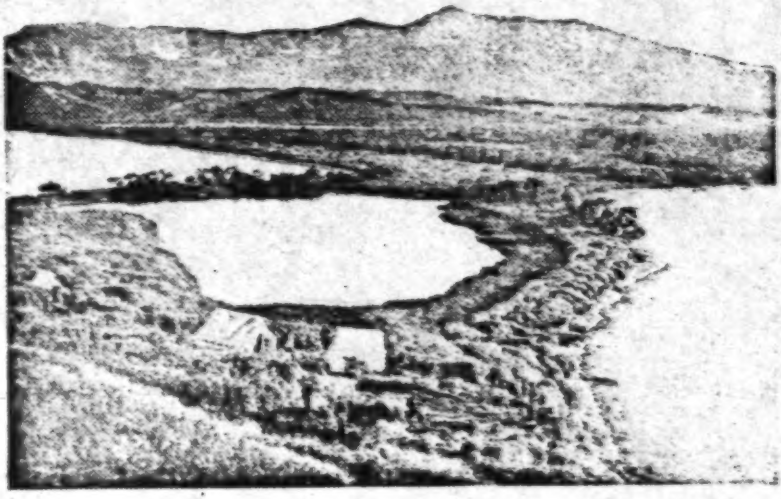

133

A. Inner pond on Cape Siwuuk in Kuril Lake. In the foreground is the author's camp and the digging of two pits. (See p. 36.)
B. Unloading the boats, preparatory to ascending the rapids of the Ozernaya River.
C. When rapids were encountered, the occupants of the boat disembarked and pulled at the ropes instead of the oars.

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ing, and we were treated with the utmoſt hoſpitality; but we had ſcarcely entered when the rain fell in ſuch abundance, that we were obliged to ſtay longer than we wiſhed.

I eagerly embraced this ſhort interval to deſcribe ſome of the objects which I had deferred till my arrival at Bolcheretſk, where, perhaps, I may find others that will not be leſs intereſting.

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The oſtrog of Paratounka is ſituated by the ſide of a river of that name, about two leagues from its mouth *. This village is ſcarcely

Peter and St. Paul; but this cannot take place till the projected improvements reſpecting the port are carried into execution. We cannot help obſerving, that the Engliſh have omitted to mention that there was formerly a church at St. Peter and St. Paul's, and that its ſituation is known by means of a ſort of tomb which formed a part of it.

* This river empties itſelf, as I have already ſaid, into the bay of Avatſcha. The ſhoals, which are commonly

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 164 133 ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavloſska*.

342 R 177 . 34 The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

they

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 of bears, who are attracted by the fiſh with which theſe rivers abound. The inhabitants aſſured me, that fifteen or eighteen were frequently ſeen together upon theſe banks, and that whenever they hunted them, they were ſure to bring back one or two, at leaſt, in the ſpace of twenty-four hours. I ſhall ſoon have occaſion to ſpeak of their chace, and their weapons.

133/501 We quitted Paratounka and reſumed our journey; twenty horſes ſufficed for ourſelves and our baggage, which was not conſiderable, M. Kaſloff having taken the precaution of ſending a great part of it by water, as far as the oſtrog of Koriaki. The river Avatſcha has no tide, and is not navigable farther than this oſtrog; and not at all indeed, except by ſmall boats, called *batts*. The baidirs only ſerve to croſs the bay of Avatſcha, and can proceed no farther than the mouth of the river, where

7:Lesseps T-3 (1787-88)1790 Kamchadal

133 501 their lading is put into these batts, which, from the shallowness and rapidity of the water, are pushed forward with poles. It was in this manner our effects arrived at Koriaki.

000 As to ourselves, having crossed the river Paratounka at a shallow, and winded along several of its branches, we left it for a way that was woody and less level, but which afforded us better travelling; it was almost entirely in valleys, and we had only two mountains to climb. Our horses, notwithstanding their burthens, advanced very briskly. We had no reason to complain of the weather for a single moment; it was so fair, that I began to think the rigour of the climate had been exaggerated; but shortly after, experience too well convinced me of its truth, and in the sequel of my journey, I had every reason to accustom myself to the most piercing frosts, too happy when

000 it ſeemed ſufficiently ſheltered, the wind penetrated on every ſide. M. Kaſloff had recourſe to the bath, which quickly reſtored him; but not daring to follow his example, I was obliged to wait the arrival of our baggage. The damp had penetrated to ſuch a degree that I ſhivered during the whole night.

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515
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343 The next day I made a trial of theſe baths, and can ſay that none ever afforded me ſo much pleaſure or ſo much benefit. But before I proceed, I muſt deſcribe the ſource of theſe hot waters, and the building conſtructed for bathing.

They are two werſts to the north of the oſtrog, and about a hundred yards from the bank of the Bolchaia-reka, which it is neceſſary to croſs a ſecond time in order to arrive at the baths, on account of the elbow which the river deſcribes below the village. A thick and

[Natchikin (Nachiki?)--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

133 and continual vapour aſcends from theſe
515 waters, which fall in a rapid caſcade from a
312 rather ſteep declivity, three hundred yards
343 from the place where the baths are erected. In their fall, which is in a direction eaſt and weſt, they form a ſmall ſtream of a foot and half deep, and ſix or ſeven feet wide. At a little diſtance from the Bolchaia-reka, this ſtream is met by another, with which it pours itſelf into this river. At their conflux, which is about eight or nine hundred yards from the ſource, the water is ſo hot that it is not poſſible to keep the hand in it for half a minute.

M. Kaſloff has been careful to erect his building on the moſt convenient ſpot, and where the temperature of the water is moſt moderate. It is conſtructed of wood, in the middle of a ſtream, and is in the proportion of ſixteen feet long by eight wide. It is divided into two apartments, each of ſix

or

7:Lesseps T-3 (1787-88)1790 Kamchadal

133 or ſeven feet ſquare, and as many high:
312 the one which is nearest to the ſide of
515 the ſpring, and under which the water is
343 conſequently warmer, is appropriated for bathing; the other ſerves for a dreſſing-room; and for this purpoſe there are wide benches above the level of the water; in the middle alſo a certain ſpace is left to waſh if we be diſpoſed. There is one circumſtance that renders theſe baths very agreeable, the warmth of the water communicates itſelf ſufficiently to the dreſſing-room to prevent us from catching cold; and it penetrates the body to ſuch a degree, as to be felt even for the ſpace of an hour or two after we have left the bath.

We lodged near theſe baths in a kind of barns, covered with thatch, and whoſe timber work conſiſted of the trunks and branches of trees. We occupied two, which had been built on purpoſe for us, and

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ber, and the 16 was ſpent in the hurry and buſtle which the laſt preparations generally occaſion. The reſt of our route, as far as Bolcheretſk, was to be upon the Bolchaia-reka. Ten ſmall boats, which properly ſpeaking, appeared to be merely trees ſcooped out in the ſhape of canoes, two and two laſhed together, ſerved as five floats for the conveyance of ourſelves and part of our effects. We were obliged to leave the greater part at Natchikin, on account of the impoſſibility of loading theſe floats with the whole, and there were no means of increaſing them. We had already collected all the canoes that were in the village, and even ſome of our ten had been brought from the oſtrog of Apatchin, to which we were going.

133/137 The 17, at break of day, we embarked upon theſe floats. Four Kamtſchadales, by means of long poles, conducted our rafts.

But

7:Lesseps T-3 (1787-88)1790 Kamchadal

133/137 But they were frequently obliged to place themſelves in the water, in order to haul them along; the depth of the river in ſome places being no more than one or two feet, 000 and in others leſs than ſix inches. Preſently one of our floats received an injury; it was preciſely that which was freighted with our baggage, and we were obliged to unlade every thing upon the bank, in order to refit it. We waited not, but preferred leaving it behind, in order to proceed on our route. At noon another accident, much more deplorable for men whoſe appetites began to be clamorous, occaſioned us a further delay. The float in which our cookery was embarked, ſunk all at once before our eyes. It will be ſuppoſed we did not ſee the loſs which threatened us, with indifferenc; we were eager to ſave the wreck of our proviſions; and for fear of a greater misfortune, we wiſely reſolved to dine before we proceeded any farther. Our dinner

000 ner ceased gradually to dispel our fears, and gave us courage to discharge the water which over-loaded our boats, and to resume our voyage. We had not advanced a verst, before we met two boats coming to our assistance from Apatchin. We sent them to the succour of the damaged float, and to supply the place of the boats which were unfit for service. As we continued to advance at the head of our embarkations, we at last entirely lost sight of them; but we met with nothing disastrous till the evening.

133/137 I observed that the Bolchaia-reka, in the windings which it continually made, ran nearly in the direction of east-north-east and west-south-west. Its current is very rapid; it appeared to me to flow at the rate of five knots an hour; in the meantime the stones and the shoals which we met with every instant, obstructed our passage

7:Lesseps T-3 (1787-88)1790 Kamchada

133/137 ſage to ſuch a degree, as to render the labour of our conductors truly painful. They avoided them with aſtoniſhing addreſs, but as we approached nearer the mouth of the river, I obſerved with pleaſure that it became wider and more navigable. I was equally ſurpriſed to ſee it divide into I know not how many branches, which united again, after having watered a variety of little iſlands, of which ſome are covered with wood. The trees are every where very ſmall and very buſhy; we met with a conſiderable number growing here and there in the very river itſelf, which increaſe ſtill farther the difficulty of the navigation, and prove the careleſſneſs, I may ſay the ſloth, of theſe people. It never occurs to them to root out theſe trees, and thus open a more eaſy paſſage.

136 Different ſpecies of water-fowl, ſuch as ducks, plovers, goëlands, divers, and others, divert

7:Lesseps T-3 (1787-88)1790 Kamchadal

contributed to make us paſs a moſt comfortable night.

133/361 The next day we fitted ourſelves out early and without difficulty. We arrived in four hours at Apatchin, but our floats could not come up as far as the village, on account of the ſhallowneſs of the water. We landed about four hundred yards from the oſtrog, and atchieved this ſhort diſtance on foot.

This village did not appear to me ſo conſiderable as the preceding ones, that is, it contained perhaps three or four habitations leſs. It is ſituated in a ſmall plain, watered by a branch of the Bolchaïa-reka; and on the ſide oppoſite to the oſtrog is an extent of wood, which I conceived might be an iſland formed by the different branches of this river.

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 I learned by the way, that the oſtrog of Apatchin, as well as that of Natchikin, had not been always where they are at preſent. It is within a few years only that the inhabitants, attracted without doubt by the ſituation, or the hope of better and more commodious fiſhing, removed their houſes to this place. The diſtance of the new oſtrog from the former one is, as I was told, about four or five werſts.

133 Apatchin afforded nothing intereſting. I left it to join our floats, which had paſſed the ſhallows, and were waiting for us three werſts from the oſtrog, at the ſpot where the branch of Bolchaïa-reka, after having made a circuit round the village, returns again to its channel. The farther we advanced, the deeper and more rapid we found it; ſo that nothing impeded our courſe the whole way to Bolcheretſk, where we arrived at ſeven o'clock in the evening,

accom-

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The Biferaïa, another very rapid River
133/361 and larger than the Bolchaïa-reka, joins it to the weſt, about the diſtance of half a werſt from Bolcheretſk. It loſes its name at the conflux, and takes that of the Bolchaïa-reka, which is rendered very conſiderable by this addition, and empties itſelf into the ſea at the diſtance of thirty werſts.

We landed at ſeven o'clock in the evening at a little hamlet called *Tchekaſki*. Two iſbas, two balagans, and a yourt almoſt in ruins, were all the habitations I could perceive. There was alſo a wretched warehouſe, made of wood, to which they give the name of magazine, becauſe it belongs to the crown, and firſt receives the ſupplies with which the galliots from Okotſk* are freighted. The hamlet was built as a guard to this magazine. We paſſed the

* When theſe galliots are obliged to winter here, they harbour in the mouth of a narrow and deep river, which pours itſelf into the Bolchaïa-reka, about fifty yards from the hamlet, higher up.

night

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000 tended to the ſouth. It appeared to be about two werſts from us, ſouth of the entrance of the Bolchaïa-reka. At the point of land juſt mentioned, we diſcovered the light houſe, and the cot of the perſons appointed to guard the wreck: unfortunately we could only ſee all this at a diſtance. The direction of the river, from the place where it empties itſelf into the ſea, appeared to me to be north-weſt, and its opening to be
133 half a werſt wide. The light-houſe is on
361 the left coaſt, and on the right is the continuation of the low land, which the ſea overflows in tempeſtuous weather, and which extends almoſt as far as the hamlet of Tchekafki. The diſtance of the hamlet from the mouth of the river is from ſix to eight werſts. The nearer we approach the entrance, the more rapid is the current.

It was not poſſible to purſue our voyage; the wind became ſtronger, and the waves increaſed

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000 increaſed every moment. It would have been the height of imprudence to quit the ſand bank, and croſs, in ſuch foul weather and ſuch feeble boats, two werſts of deep water, which is the width of the bay formed by the mouth of the river. The governor, who had already met with ſome proofs of my little knowledge of navigation, was very anxious however to conſult me upon this occaſion. My advice was to tack about, and return to the hamlet where we had ſlept; which was executed immediately. We had great reaſon to be pleaſed with our prudence; ſcarcely were we arrived at Tchekafki when the weather became terrible.

133 I conſoled myſelf with the idea, that I had at leaſt obtained my end, which was to ſee the entrance of the Bolchaïa-reka. I can aſſert with confidence, that the acceſs to it is very dangerous, and impracticable

to

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133 to ſhips of a hundred and fifty tons burthen. The Ruſſian veſſels are too frequently ſhipwrecked, not to open the eyes both of navigators who may be tempted to viſit this coaſt, and of the nations who may think of ſending them.

The port, beſides, affords no ſhelter. The low lands with which it is ſurrounded, are no protection againſt the winds which blow from every quarter. The banks alſo which the current of the river forms, are very variable, and of courſe it is almoſt impoſſible to know with certainty the channel, which muſt neceſſarily, from time to time, change it direction as well as its depth.

We paſſed the reſt of the day at Tchekafki, being unable to proceed to the ſhipwrecked veſſel, or to return to Bolcheretſk. The ſky, inſtead of clearing up, became covered on all ſides with ſtill blacker and thicker

000 After a few bad nights, ſleep at laſt overpowered me, and I was inſenſible to all noiſe. By degrees I became ſo inured to the cries of theſe animals, that I could repoſe in the midſt of them in perfect tran-
231 quillity. I ſhall mention in this place, that the dogs are only fed once a day, at the end of their journey; their repaſt conſiſts commonly of a dried ſalmon diſtributed to each of them.

133/361 The oſtrog of Malkin is ſimilar to thoſe which I have already deſcribed. It contains five or ſix iſbas and a dozen balagans, is ſituated upon the border of the Biſtraïa, and ſurrounded with high mountains. I had no time to viſit the hot ſprings that are ſaid to be in this neighbourhood, the waters of which are ſtrongly impregnated with ſulphur; and one in particular, iſſuing from the declivity of a hill, forms at the bottom a baſon of tolerably clear water,

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 iſſuing from the mountains, and uniting at this place to pay their tribute together to the Kamtſchatka. Neither of them was frozen, which I aſcribed to the extreme rapidity of their current. The ſpot where we paſſed them was truly pictureſque; but the moſt ſingular object was the numerous firs that ſkirted theſe rivers, and which ſeemed like ſo many trees of ice. A thick hoar-froſt, occaſioned perhaps by the dampneſs of the place, covered every branch, and gave to the whole a bright and chryſtalline appearance.

133 At ſome diſtance from Tolbatchina we croſſed a heath, from which I could perceive three volcanos; none of them threw up any flames, but merely clouds of very black ſmoke. The firſt, which I before mentioned in going to Machoure, has its reſervoir in the bowels of a mountain that is not exactly of a conical ſhape, the ſummit being flattened and but little elevated.

This

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133 This volcano, I was informed, had been at reſt for ſome time, and was ſuppoſed to be extinguiſhed, but it had lately kindled again. North-eaſt of this is a peak, the top of which appears to be the crater of a ſecond volcano, which continually throws up ſmoke, though I could not perceive the ſmalleſt ſpark of fire. The third is north-north-eaſt of the ſecond; I could not obſerve it as I wiſhed, a high mountain intercepting almoſt entirely my view. It derives its name from the village of Klutcheſkaïa, near which it is ſituated; and I was told that we ſhould paſs cloſer to it hereafter. The two other volcanos are called in like manner after the oſtrog of Tolbatchina, where we arrived in good time. This village is upon the Kamtſchatka, forty-four werſts from Chapina, but it contains no-
585 thing extraordinary. We were informed
177 that there had been a Kamtſchadale wedding in the morning. I regretted the not

 having

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000 Kreſtoff, towards the village of Klutcheſ-
kaïa, which is thirty werſts from it.

The weather, which, ſince our departure
from Apatchin, had been very fine, though
cold, changed all of a ſudden in the after-
133 noon. The ſky became clouded, and the
wind, which roſe in the weſt, brought us
a heavy ſnow. It extremely incommoded
us, and prevented me from examining as I
could have wiſhed, the volcano of Klut-
cheſkaïa, which I had ſeen at the ſame
time with thoſe of Tolbatchina. As far as
I could judge, the mountain that carries it
in its womb, is conſiderably higher than the
other two. It continually throws up flames,
which ſeem to aſcend from the midſt of
the ſnow, with which the mountain is co-
vered to its very ſummit.

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563
R Upon the approach of night I came to
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.24 the village of Klutcheſkaïa. The inhabi-
tants

000 We ſlept at this village, and ſpent a conſiderable part of the next day there, from the apprehenſion of a hurricane, which, it was ſaid, threatened us. We were at laſt relieved from our fears, and though it was tolerably late when we reſolved to proceed, we reached Drannki, which is thirty werſts. The ſituation of this oſtrog is ſimilar to the preceding one. Here we found M. Haus, a Ruſſian officer: he came from Tiguil, and brought M. Kaſloff various objects of natural hiſtory.

133 We left Drannki at break of day. In the afternoon we croſſed a bay that was fifteen werſts wide, and from twenty-five to thirty deep; the entrance was ſcarcely leſs than five werſts: it is formed by the ſouth coaſt. This coaſt is low land, gradually declining as it advances into the ſea. The bay runs weſt-north-weſt and eaſt-ſouth-eaſt. It appeared to me that weſt-north-weſt of its entrance, towards Karagui, veſ-

ſels

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133 ſels may ſafely anchor, and be ſheltered from the ſouth, the weſt, and the north winds: The ſouth of its entrance does not afford ſo good a harbour, as it is ſaid to have various ſand banks; I was obliged to truſt to report, the ice and the ſnow preventing me from obtaining any better information.

361 We travelled this day ſeventy werſts, and
631 came in the evening to Karagui, which is upon an eminence, and affords a view of the ſea. It has only three yourts and twelve balagans, at the foot of which the river Karaga paſſes. This river pours itſelf into the ſea at the diſtance of a few gun ſhots from the oſtrog, which is the laſt in the diſtrict of Kamtſchatka; a hamlet a hundred werſts farther, and containing but few Kamtſchadales, not being included within its limits.

As we were obliged to wait here for a

22: Guillemard T-2 (1882) 1886 Kamchadal

000 On the afternoon of August 4th, we weighed and left the port of Hakodadi in Yezo, northward-bound for Kamschatka. We dipped our farewells to old friends of H.M.S. *Champion* and *Zephyr*, and steamed out against a fresh easterly breeze. As we proceeded the wind increased, and the weather became so thick that we resolved on running in under the lee of Cape Siwokubi, and anchoring for the night. Next morning it was clear, though still blowing strong from E.S.E.; but as we were anxious to lose no time, we put the ship under fore and aft canvas, and beat under steam and sail past Cape Yerimo, the southern point of Yezo, into the open sea. The Kurosiwo or Japanese current—the Pacific homologue of the Gulf Stream—widening as it passes the eastern coast of Japan, runs northward as far as Kamschatka, and it is to its warmth that the comparative freedom from ice of that coast is supposed to be due. Between it and the Kurile Islands is a narrow counter-current of cold water, running to the S.W. With the intention of avoiding the latter, and obtaining what advantages we could from the Kurosiwo, we resolved on shaping our course so as to keep at a uniform distance of about a hundred and fifty miles to the eastward of the Kuriles, where the current is supposed to be strongest. The result, however, was a failure. For the first two days we experienced a north-easterly set, but we had no sooner got fairly out into the presumed middle of the Kurosiwo than we encountered a southerly current. At the same time we entered the region of fog, which, during the summer, is an almost constant phenomenon of the northern part of the North Pacific. This fog apparently formed a stratum of no great depth, for, although thick enough all round us, it was often sufficiently clear overhead to enable us to get a glimpse of the sky, and although morning sights were impossible, we were always able to get a meridian or ex-meridian observation for our latitude.

133 Navigation in these lonely and misty seas presents but few points of interest even to the sailor, and it was accordingly with no little pleasure that, on the morning of the 13th of August, we

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133 emerged from the fog much as a train runs out of a tunnel, and found that Kamschatka was in sight. The sharp peak of the Vilutchinska volcano enabled us to make out our position, and we steered north for Avatcha Bay. It was a magnificent morning, and as the yacht rolled heavily over a dark blue sea, on whose surface the waves broke in patches of snowy whiteness, now plunging her bows deep into the water with all the sense of pure physical enjoyment of a living creature, now shaking herself free and pouring the seas in bright streams from her scuppers, she formed a picture which might have aroused the admiration of even the most apathetic of landsmen, and one which was provided with a fitting background. Rarely have I seen a wilder-looking coast than that of south-eastern Kamschatka. The brilliant sunshine which poured upon rock and headland redeemed it from gloom, but the wildness and desolation of the scene was indescribable. Precipitous cliffs, at the foot of which none but a bird could land; deep valleys running down to the sea at whose mouths still lay the accumulated masses of last winter's snows; pinnacle rocks like rows of iron teeth shown to warn off any one rash enough to contemplate a landing,—this was what met our gaze as we anxiously scanned the coast with our glasses. Beyond, the land rose in abrupt humps and irregular masses, and appeared to be clothed with a uniform growth of low, but dense underwood, above which the distant cones of snow stood out clear and hard against the sky. It was an impracticable-looking country enough, but we had visited it with the firm intention of going through it, and experience in other lands having taught us how often difficulties disappear upon a closer acquaintance, we did not allow ourselves to feel discouraged. An hour or two later we arrived at the narrow entrance of Avatcha Bay, and shaped our course over a smooth sea for the little harbour of Petropaulovsky.

Avatcha Bay is one of the finest harbours in the world, if not actually the finest. Rio and Sydney have no mean claims for this position of honour, but those of us who had seen both were

133 unanimous in awarding the palm to their Kamschatkan rival. A nearly circular basin of some nine miles in diameter, and with a narrow entrance opening to the S.S.E., it is roomy enough to accommodate the navies of the world. It is entirely free from dangers, has an even depth of ten or twelve fathoms, and owing to its affording excellent holding ground and being well protected from all winds, it is perfectly safe in all weathers. But the ordinary traveller will be struck not so much with its nautical excellencies, as with the superb scenery with which it is surrounded. To the south rises the Vilutchinska volcano, now quiescent, a graceful cone of about 7000 feet; and a little farther eastwards a huge flat-topped mass, exceeding it in height by a thousand feet or more, obtrudes itself as a rare exception to the rule of cone-shaped mountains which seems to obtain throughout the country. It is nameless in the charts, for we are in the land of volcanoes, and it is only 8000 feet in height! On either hand on entering are the two secondary harbours Rakova and Tareinska—the latter nearly five miles in length—and within them again are others on a still smaller scale. Nature here at least has treated the mariner right royally. The iron-bound coast without may be as bad a lee shore as any skipper need wish to see, and the Pacific Ocean may too often belie its name, but here he can rest quietly, and sleep *sur les deux oreilles* until such time as he weighs anchor for the homeward voyage.

But if the southern part of the bay is fine, it is difficult to find words to describe the beauty of its upper portion. We look north, and the scenery on which we have just turned our backs is forgotten, for there, shoulder to shoulder, their vast fields of snow glittering in the sun, stand a trio of volcanoes such as one rarely sees. From the summit of Avatchinska, the centre peak, a delicate streamer of white vapour floats out horizontally, sharply defined against the blue of the clear northern sky. So closely do these mountains seem to hedge in the bay, that it is hard to realise the fact that they are twenty miles distant. But in Kamschatka the

22: Guillemard T-2 (1882) 1886 Kamchadal

133 scenery is on a large scale, and a reference to the chart explains the matter in five figures.[1]

Mr. Frederick Whymper, in his "Travel and Adventure in the Territory of Alaska," has given an excellent illustration of this group of mountains. Koriatska, to the north and west, stands alone. Avatchinska and Kozelska are somewhat less lofty, the former being close upon nine thousand feet; while the latter is, according to different observers, either 5328 or 9054 feet[3] in height. Such a discrepancy can only be accounted for by the supposition that Avatchinska should be credited with the latter figures. During Mr. Whymper's visit in 1865, Koriatska alone emitted smoke, the others being apparently extinct; but in the month of June, ten years previously, Mr. Tronson found Kozelska in action, sending forth dense volumes of smoke, and covering the surface of the water with ashes.[2] Since then there do not appear to have been any eruptions, and in spite of the white pennant floating at the peak, the grand old mountain looks calm and peaceful enough, guarding the lonely stretches of forest and tûndra at its base.

000 It is only with an effort that one withdraws one's gaze from the exquisite beauty of mountains such as these. What is it that influences us so deeply in the sight of those eternal snows? In what lies that wondrous charm that we experience only in the regions of the north? After many years of travel I think that there is one scene which has, perhaps, remained more vividly stamped upon my memory than any other—a placid river in northern Lapland, down whose stream I floated, drinking in the perfect beauties of the changing autumn. Amid all the mass of scarlet and gold that hung above the mirror-like surface of the water not a single leaf was stirring,—not a sound was to be heard.

[1] The height of Koriatska is 11,554 feet.

[2] Tronson,—"Voyage of the *Barracouta*," p. 109.

[3] From the fact that Mr. Tronson appeared to consider Avatchinska and Koriatska as one and the same mountain, and gave an erroneous height for Kozelska, it seems far more probable that it was the first-named volcano that was really in eruption at the time of his visit.

000 Before us lay the peaks of dazzling snow, and it seemed as though all Nature were hushed and worshipping at that throne of spotless purity.

Rest and purity then—the unattainable, in other words—in these lie the charm. The fairest tropic scene holds no deeper meanings such as these. Beauty of form there doubtless is, a far greater beauty perhaps than that of northern climes, but, after all, it is but soulless. The teeming life of a tropic forest, the marvellous wealth of vegetation, the reckless sacrifice of the weakest, produce

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WHISKERED PUFFIN. (*Lunda cirrhata.*)

upon the mind the same effect as do the streets of a crowded city. No grandeur of "calm decay," no pathos of the changing seasons is here. It is a fierce struggle for existence, fatal to any except the most purely material thought.

133/137 The shores of Avatcha Bay extend to the traveller a more smiling welcome than the iron-bound coast outside. Here, the lower hills slope gently down to beaches dotted with driftwood, or, covered with birch and heather, steeply overhang the sea. Behind they are backed by higher ranges clothed with undergrowth, and rising to the height of fifteen hundred feet or more. To the north-west only is this basin-like appearance broken, where the small

133/137 Paraminka and Avatcha rivers have formed a delta with innumerable mouths. Low ground also intervenes between the three great volcanoes and the bay, but the height of the mountains annihilates
136 the distance. Hardly a sign of human habitation is to be seen, but the calm surface of the water is broken by quantities of water-fowl, whose nesting-places are the steep rocks at the entrance of the bay. Most noticeable among them are the Whiskered Puffins (*Lunda cirrhata*), and the still quainter-looking Tufted Auks. The little

TUFTED AUK. (*Simorhynchus cristatellus.*)

133 village of Petropaulovsky is invisible, hidden behind a steep promontory forming the western boundary of its harbour. What an admirable harbour it is from a sailor's point of view can best be seen by a glance at the engraving. From the end of this promontory a shoal extends nearly to the other shore, but leaves a channel deep enough for ships of the largest draught. Within this again a sand-spit,—so straight, so narrow, and so regular in form, that it is hard to believe that it does not owe its existence to the hand of man,—runs out from the opposite shore to within a stone's throw
000 of the promontory. We steam in steadily towards the land; to an

22: Guillemard T-2 (1882) 1886 Kamchadal

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houses may be reckoned at about one-third of that number. Kittlitz, in 1829, found the settlement to number about two hundred inhabitants, and at the time of our visit we were informed that there were over three hundred; a number that I should myself be inclined to think overstated.

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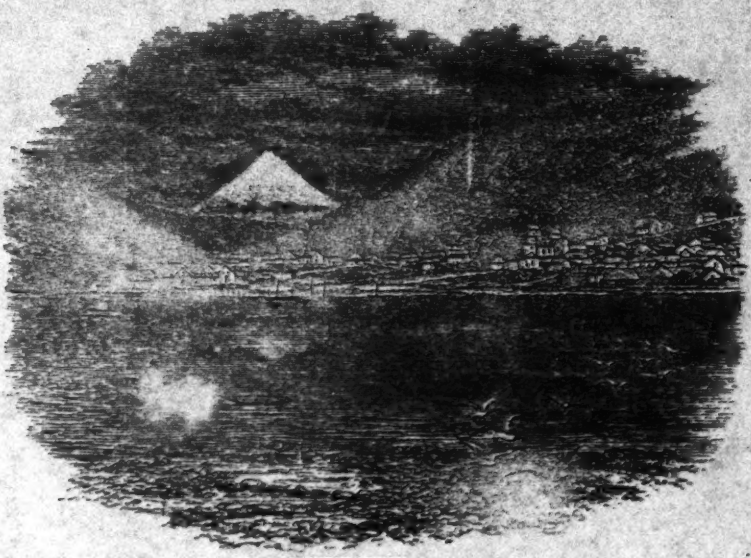
Standing on the now deserted sand-spit,—the natural breakwater of the harbour,—the view of the little town and its surround-



PETROPAULOVSKY HARBOUR.

ings is strikingly picturesque. To the left is the wooded promontory, the scene of the unfortunate disaster which occurred to the forces of the Allied Fleet in 1854. On the right a hill of some fifteen hundred feet dominates the town, whose log huts are clustered around the shores of the little bay. Here and there a white-painted house of greater pretension strikes the eye, and a stunted grove of trees shelters the church, and the graveyard studded with Russian crosses. Behind the town, artistically filling in the gap

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

22: Guillemard T-2 (1882) 1886 Kamchadal

231 *Rien n'est sacré pour un sapeur.* Raw hides, boots, and even babies,
136 it is said, occasionally vary his diet!

To our ship's crew Petropaulovsky appeared little less than a paradise. The bright sunny weather and clear cold nights were a pleasant change after the heat of the tropics, and the forecastle mess was furnished with many unaccustomed delicacies. The
136 harbour and rivers teemed with fish; periwinkles *à discretion* were
137 to be had for the picking, and milk and bilberries were abundant. The whiting and herrings were, however, left in comparative peace, owing to the ease with which salmon were to be obtained at the mouths of the Avatcha and Paraminka rivers. On one occasion no less than three hundred of these fish were obtained at one haul of the seine, and the crew occupied themselves in salting, smoking,
000 and otherwise preserving the spoil. Jack was in his element, and doubtless would not have objected to passing the rest of his life in such a fascinating spot. Our shooting excursions to various parts of the bay were much enjoyed by the boats' crews, and the forward part of the ship began ere long to be ornamented with bearskins that the men had obtained by purchase or barter from the natives. Meanwhile we had been making arrangements with the Ispravnik, and the individual I have before mentioned under the title of the King of Kamschatka, for the ponies that were necessary for the first part of our journey; but, as there was some delay in getting
133 together the requisite number, a party of us started to visit the hot springs of Kluchi,[1] which lie some few miles from the shore on the other side of the bay. Excepting during strong south-easterly winds, which send a somewhat heavy swell into the entrance, the passage across is generally pleasant enough even in small boats. Though blocked with ice in the winter, the bay is, we understood, but rarely frozen right across, although the harbour of Petropaulovsky is, of course, closed for some months. Landing in a bay north-west of the entrance to Tareinska Harbour, we passed through an extensive birch-forest, and emerged at length on the shores of a

[1] Kluchi, I believe, is the Russian word for springs.

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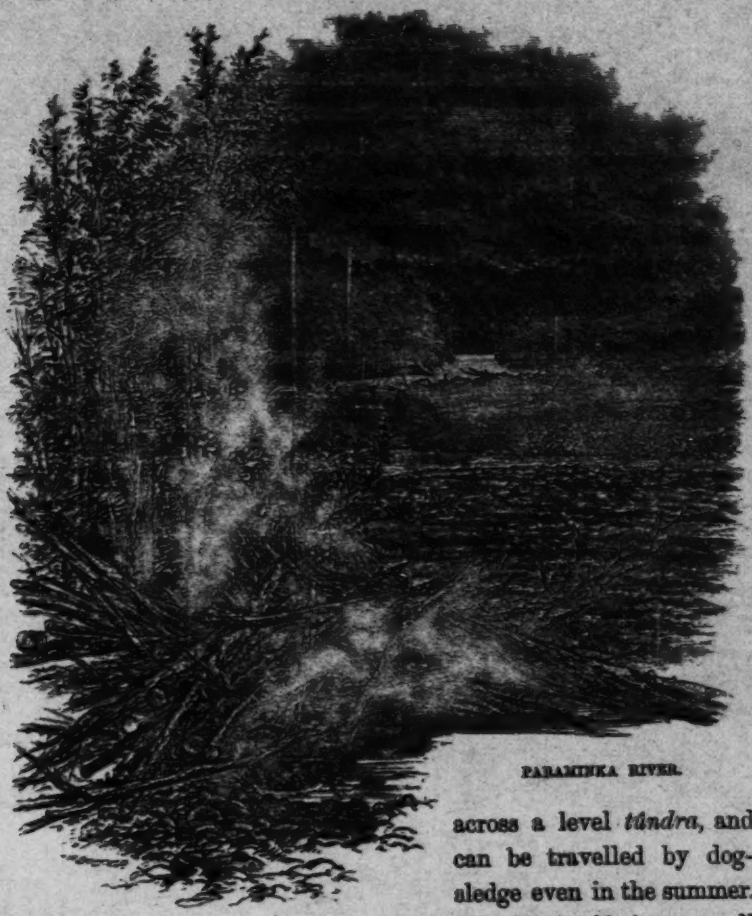
picturesque lake, across which we were conveyed in dug-out canoes to a small village on the opposite shore. From here the road lies



PARAMINKA RIVER.

across a level *tundra*, and can be travelled by dog-sledge even in the summer. Kluchi itself is a small village composed of a few log-built huts and balagans, but, with its background of the Vilutchinska volcano, is prettily situated. It stands in an open valley, in which some attempts at cultivation are made. The hot springs—the steam from which is visible at some

22: Guillemard T-2 (1882) 1886 Kamchadal

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distance—have a temperature of about 108° Fahr., and appear to be nearly devoid of sulphur. They are much resorted to by the natives for cutaneous and other disorders, and have huts built over them for bathing purposes, thanks to the orders of the Ispravnik. Near the village runs a branch of the Avatcha River, down which our party paddled to the sea; and on arriving at the yacht we were pleased to learn that most of the horses had been brought into the settlement, and that there was every prospect of our starting on our long-planned expedition through the interior in the course of a couple of days.

22: Guillemard T-2 (1882) 1886 Kamchadal

492 convenient in this kind of travelling is avoided. A thick layer of bearskin was placed over the saddle-cloth, and effectually prevented sore backs. Our personal gear, enclosed in bags made from the skin of the hair-seal, was easily adjusted, but the photographic apparatus and other breakable objects required more care and time,
133 and it was noon before we were fairly off. We bade adieu to our
487 friends, and passed out through the narrow gap at the back of the village towards a small lake of brackish water which hems it in to the north. Here at one time stood the hospital mentioned in Captain Cook's "Voyages," but no trace of the building now remains. Circumventing the lake, we struck off to the north-west and, before long, the track, which had never been very well marked, became obliterated. Our path led through a rough but picturesque country, dotted here and there with stunted birches, and we steered across it for a certain point in the landscape recognised by our guides. By our side trotted one of the most ornamental members of the expedition, whom I have hitherto neglected to introduce—Verglaski, a magnificent bear-dog belonging to Jacof, of an aspect almost as solemn as his master. Our horses had hitherto gone fairly well, but during a short halt that we made to adjust some of the packs a stampede occurred, and in an instant the scene was changed to one of the wildest confusion. Kicking, plunging, colliding against trees, and dashing wildly in all directions, it was not long before the horses succeeded in disembarrassing themselves of their loads, and the ground presented the appearance of having been recently passed by a beaten army in full retreat. The horseboys, more than half drunk, pursued the fugitives, cursing volubly in Russian and Kamschatdale; while we, to whom these little unpleasantnesses of packhorse travel had not even the merit of novelty, lit our pipes resignedly and proceeded to gather up the fragments. It was a full hour ere we were again *en route*. These incidents, "tedious as a twice-told tale," and trying alike to the temper and the baggage, recurred again and again. We progressed, as it were, by a series of stampedes, and our horseboys became almost as erratic in their locomotion as their charges.
[of Petropavlovsk--Analyst]

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locomotion as their charges. At this rate of advance our journey's end seemed distant indeed. We pressed on, however, as well as we could, and crossed a small plain from which the base of the Avatchinska group of volcanoes was visible to our right. Their summits were hidden in thick mist, and the weather, which had hitherto been fine, now looked most threatening. Arriving at a small stream, Vodki and his two companions halted, and declaring that there was no water farther on, proceeded to unload the horses. This we soon put a stop to, and telling them that, water or no water, we had no intention whatever of camping for another hour or more, we resumed our journey. The scenery now changed, and we entered a gloomy birch-forest with much thick undergrowth. This was in places six or eight feet, or more, in height, and was composed of coarse grass and giant umbelliferæ, with an occasional blue monkshood, varied in the more open parts with large patches of yellowing bracken. Before long we reached another stream, and were thus enabled to prove the truth of our surmises; but it was not till some time later that we finally halted for the night, the horseboys being by this time scarcely in a condition to proceed farther. We were glad to pitch camp and get a rest, as it had already begun to rain. Before turning in we succeeded in finding Vodki's brandy bottle, but it was perfectly empty. The man had disposed of a pint or more of raw spirit since leaving the settlement!

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In this kind of travel movement is not very rapid for the first day or two until every one has shaken down to his work, and on the following morning we were nearly three hours in getting breakfast and striking camp. The horseboys were depressed and inclined to be penitent. If, like an old Kafir servant of mine, they estimated the amount of enjoyment of the previous night by the strength of the morning's headache, they ought, to all appearances, to have been well pleased. We had decided to leave Avatcha on our left, and to make for Stari-ostrog,[1] a small village a little higher up the Avatcha River, and forty versts from Petropavlovska.

[1] The *ostrogs*, or small forts, were erected by the Russians in bygone days as a protection against the natives at the time of the first settlement of the country. The name now alone remains, all traces of fortification having long since disappeared.

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared
251 to be teeming with salmon. Stari-ostrog, situated on the right bank, consists of ten huts and a large number of fish-drying sheds.
262 The long Kamschatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226/251 In company with our English-speaking friend we went to inspect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133/137 It was late in the afternoon before we were again *en route*, our course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usually exasperating

[Avacha--Analyst]

435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 On the morning of August 22d we came for the first time to a
137 *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our
132 course—for we were on what a native would doubtless call the
487 "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

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132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 361 We reached Narchiki early in the afternoon, and were greeted by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 136 226 Narchiki is placed on a little branch of the Avatcha River, which is here not more than eighteen inches deep. Standing upon its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our 136 226 horses nearly stepped upon them. Their back fins were visible as far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

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000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

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515 that the hand could not be borne in it. Of these, as in Japan, there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet.
322 The birch is to the
824 inhabitant of northern
531 regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

BIRCH-BARK BOX.

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322 ornamented with stamped designs, and are occasionally painted, or
531 rather dyed, with blue and white; while the oval shape so commonly seen in Scandinavia is not infrequent. To the European traveller the tree is equally useful. Cups and other articles can be made with the greatest readiness; fires can be lighted in the wettest weather with the thin inflammable bark, and the inner layers of the latter form excellent writing-paper, the characters on which no quantity of rain will injure or render illegible.

133 The scenery some miles north of Narchiki begins to alter in
136 character, an alteration that is distinctly for the better. The monotony of the birch-forests is relieved from time to time by openings where the dense undergrowth is supplanted by little rocky knolls covered with bright mosses. The ground becomes more broken and the open spaces larger, and before long the country approximates closely in character to that which, in Scandinavia, would be designated the lower fjells. We had hitherto shot but little game, but here ptarmigan were abundant,[1] and we were able with ease to secure as many as were necessary for the table. Farther on, we came to a small stream, which was, most probably, an affluent of the Great Bolcheresk River, which debouches into the Okhotsk Sea on the western coast of the peninsula. It was crowded with dead and dying fish; and the remnants of some recently devoured ones upon the bank, together with fresh spoor of bear around them, told us that, in all probability, Bruin was not far off.

I had never before seen the tracks of this animal in such abundance, but farther north it was common enough to see the river-banks as much trampled as if a herd of cattle had been driven down to water. The bears at this season of the year live entirely upon salmon. Later, when this diet fails them, they take to berries, upon which they live until the time of hybernation, which is generally

[1] Probably a sub-species of, or perhaps identical with, the Dal-ryper or Willow Grouse of Scandinavia (*Lagopus albus*). I unfortunately omitted to preserve specimens of this bird until it was too late, and we did not shoot any after we had once begun the river journey.

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136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 137 Our road, some time after leaving Narchiki, had led to the west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature 132 of northern landscapes, we put up several coveys of ptarmigan; 136 and on the outskirts of a small wood we obtained our first 231 Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

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231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchain-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

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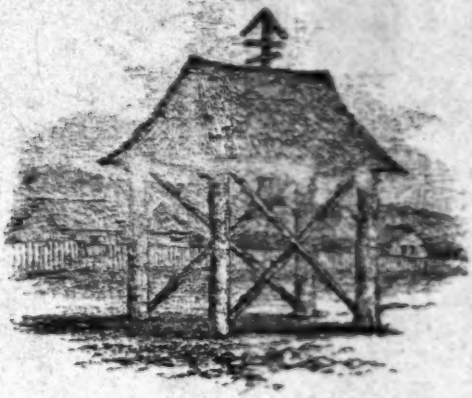
133/137 We passed two of the level seas of marshy ground that for lack of a better name I have hitherto called *tundras*. The term is, strictly speaking, applied only to the vast stretches of ground of this nature that are so wearisome to Siberian travellers. Here, however, the only difference lies in the size, and as we have no corresponding English word, I have preferred to retain the Russian name. The thick forests of birch were no longer to be seen, and the country, though still wooded, was more open, large clearings



BELFRY AT GUNAL.

being not infrequent. The familiar monkshood, too, whose spikes of flower are in Kamschatka snowy white, as well as of the ordinary shade of violet that our English gardens exhibit, had almost entirely disappeared, and we saw but little more of it during the rest of our journey. The number of bilberries was enormous, but the cranberry was much less abundant, and its berries as yet were hardly ripe.

Riding quietly along in advance of our party, we suddenly came almost upon the top of two very fine bears, with a young cub between them. We were unfortunately without our rifles at the time, and before we could get them the animals had made off,

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133/137 greatly to our disgust; and, though we spent some time in following them up, we did not succeed in getting sight of them again. They had doubtless got scent of us, and were far away. Bears are always much more disturbed by getting wind of human beings than by any noise the latter make, or even by their appearance; and the hunter, although his movements are by no means those of the stealthy-footed Malay, knows that unless he works to windward his trouble is in vain. The number of these creatures in Kamschatka must be enormous. Afanasi told us that there are hunters who have killed over four hundred in their lifetime, and we heard that at a little hamlet on the Bolcheresk River more than ninety had been shot and trapped during the summer. July, August, and September are the best months for them, as they haunt the river-banks at that season for the fish, and are in most excellent condition.

The heat at noon was nearly as great as it had been on the previous day, and the business of supplying our larder with ptarmigan for the many mouths we had to feed involved a very considerable amount of exertion; and, as we ploughed through the soft moss, sinking up to our knees at every step, "larding the lean earth as we walked along," it was difficult to realise that at night-
000 fall we should be back again in an Arctic climate. The birds were luckily tolerably abundant, and we had obtained a sufficient number on pitching camp for the night. Capercailzie apparently were rare. We had seen but few, and up to this period had only succeeded in obtaining one, and our game-birds were consequently limited to the Willow Grouse.

The Englishman travelling in Kamschatka who has reached his destination, not by the desert steppes of lonely Siberia, but by way of Ceylon and sweltering Singapore, where almost every bird he sees is unfamiliar to him, cannot fail to be struck, however unobservant he may be, with the resemblance of the avifauna of the new region in which he finds himself to that of his own country. He disturbs a Turnstone or a Golden Plover as he lands, perhaps,

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000 He had been hard hit, and marks of blood were plentifully visible as we took up the spoor. The vegetation was, however, so thick, and everywhere so overrun with the trail of these animals, that before long we had to give up the search, in spite of the aid of
133/136 Verglaski. We therefore returned, and striking camp, proceeded up the valley of the Bolcheresk River, as on the previous day. The river here runs due south through a flat plain covered with yellow grass and about three or four miles in width. It is hemmed

REINDEER RIDING, KAMSCHATKA RIVER.

in by mountains which are at first of no great height, but as the head of the valley is approached the scenery becomes finer. We rode towards it under heavy rain, but before long the weather cleared, and disclosed to view a gloomy gorge on our right, about eight miles distant, from which the river evidently debouched. At the same time another valley became apparent, joining in from a north-north-westerly direction, and the stream which flowed through it appeared to have the same source as the Bolcheresk, or at least to rise at no great distance from it. We had got at last to the head waters of the Kamschatka River!

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133 Early in the afternoon we arrived upon its banks, and it was with no little interest that we inspected the river that was to bear us some four or five hundred miles upon its bosom before we reached the sea. It was a little stream barely fifteen yards across, and not more than a foot or eighteen inches in depth. The Bolchaia-reka, which we had just left, had been teeming with fish, but here not one was to be seen, and the disgusting smell of decaying salmon that is in Kamschatka the almost invariable sign of
000 the proximity of a river, was conspicuous by its absence. In a small grove of trees close by we found two rough log-cabins, which had doubtless been the winter quarters of some sable-hunters. They were deeply sunk in the ground, and by their dilapidated condition, had evidently been built many years ago. We were not sorry to find them, as it was our intention to camp here and try for bear, and at the same time, if possible, to explore the source of the two rivers. To our great disgust, however, the presence of a kettle hanging on a stick, and the yet warm ashes of a camp-fire, spoke in unmistakeable terms of the ground having been so recently disturbed as to render our chance of sport in the immediate neighbourhood but a poor one. We accordingly pushed on, and after riding for a couple of hours, struck the river once more at a most picturesque bend in its course. The ground in the vicinity was covered with fresh bear-tracks, and thinking we could not do better, we once more prepared to camp. At this juncture Vodki appeared, and begged us to try farther on, where the ground was everything that was perfect, and the bears in incalculable multitudes. "Just one verst more, little father." For the first and only time we yielded to his advice, and resumed our march. Verst after verst was passed and still it was "one verst more." Two hours and more elapsed before we began to realise that we had been befooled. To be befooled by Vodki!—the thought was too galling. Not in the best of tempers, we altered our course for the river at once, debating what form of punishment we should adopt. Our trouble, however, was saved us. Vodki, in no better temper than we at his plans

000 having failed, kicked one of the packhorses violently in the belly while unloading it. The effect was excellent. The poor animal, who, like the Pope's mule in Daudet's charming little story, had many an old score to pay off, turned round and bit his aggressor so successfully in the face as to leave him with a portion of his cheek hanging down. Here we interfered to prevent reprisals, and while the conqueror was led off to a patch of the most succulent-looking grass we could find, Vodki retired to his tent to nurse his wound for the next two days.

133/137 Accustomed as we had become during the earlier part of our journey to the wonderfully dense growth of the annual herbage, especially in the birch-forests and in the vicinity of the rivers, I do not think we had ever seen it in more rank luxuriance than we found it here. Our camp was pitched on a little eminence two or three hundred yards from the river, but the latter would have been almost unapproachable had it not been for the numerous bear-tracks that led in every direction through the forest of grass. As it was, the vegetation rose three or four feet above our heads, and was in places so thick that we could never be sure that our next footstep would not precipitate us into one of the hidden streams with which 000 the marshy ground abounded. In such ground shooting is almost impossible, and the only plan is to lie up in concealment on the banks of the river, on the chance of a bear coming out in the neighbourhood to fish.

We spent the remaining two or three hours of daylight in this monotonous and chilling amusement, and rose wet and stiff with cold without any success having attended us. The bears had in all probability deserted this part for some other place where fish were more numerous, and the only recent spoor we saw was that of an otter, an animal that is apparently far from common in the peninsula.

136 The following morning, since there appeared to be no fish in the river, we put our rods together and tried a fly in Kamschatkan waters for the first time. Paradoxical as it may seem, a river of

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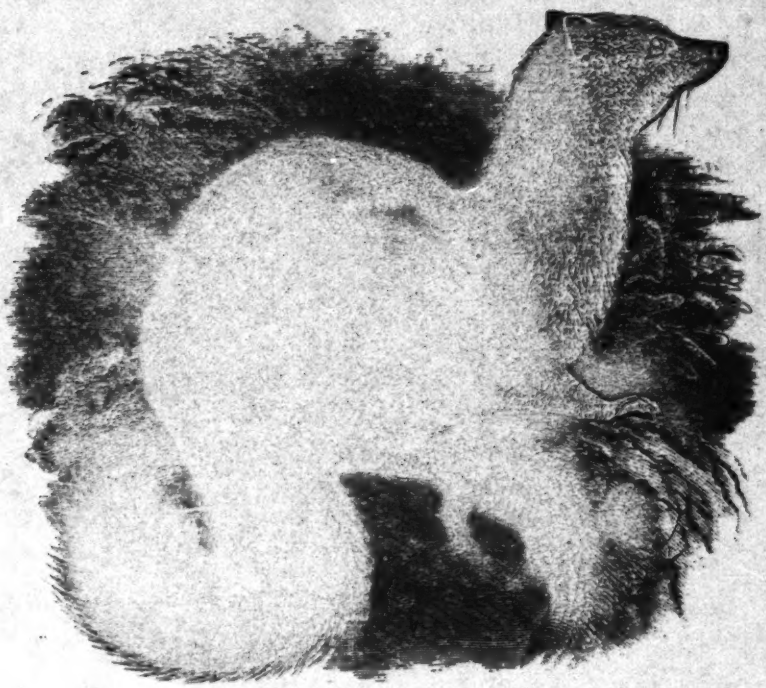
133/172 number killed by the party was close on one hundred and twenty skins. The Kronotsky Lake, which has never yet been visited by Europeans, lies south of the great group of volcanoes at the mouth of the Kamschatka River, and some sixty miles east of Melcova.[1] It is now completely deserted by the natives, but, as far as we



SABLE.

could gather from our hunters, it has remains of ancient lake-dwellings on its shores, with deposits of shells and other objects of like nature resembling the *kjokken-möddings* of Northern Europe which, as far as I am aware, are unknown in the country at the present day.

Of the number of sables killed annually in Kamschatka it is

[1] Both Melcova and the lake are wrongly placed on the Admiralty chart; the former is nearly ninety miles north of its assigned position!

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114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

322 from the trunk of the *topoyina* or poplar-tree. They are generally
501 about twenty-five or thirty feet long, by two feet in beam and depth, and are made to a great extent by burning out the interior of the tree-trunk selected, the finishing only being done by means of axes. We were able to procure five of these boats, and by their aid constructed two rafts in the following manner. We lashed three together side by side, with an interval of about one foot between each, taking care to place the weakest in the middle, and on this foundation placed a platform of poles and axe-hewn planks amidships, for a length of twelve or fourteen feet. Over this platform we constructed a rough shelter-hut, with a birch-bark roof sloping away behind, and the back and sides composed of water-proof sheets which could easily be furled or removed when necessary. The other raft, which carried Louis, Cook, and our two hunters, was made in the same way, but without the hut; and owing to its having but two canoes as a foundation, was laden fully up to where its Plimsoll-mark should have been. Our natives sat at the head and stern of each canoe, wielding paddles with a spade-like handle. They were also provided with poles, the use of which, wherever the river was sufficiently shallow, they seemed greatly to prefer. Shortly before noon our preparations were completed, our men waved their adieux to the remaining three-fourths of the inhabitants of Sherowmy, and pushing out into mid-stream, we began our descent of the river.

PADDLE.

133 Immediately below the settlement the branches of the Kamschatka reunite to form a stream nearly as wide as the Thames at
136 Hampton Court, but scarcely more than a foot or two in depth. The current is rather swift, but without rapids, and the only dangers to be apprehended are the snags beneath the surface of the water. In the upper part of the river there are not many, but, lower down, the tremendous freshets which occur on the

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136 melting of the snows carry down trees of large size, piling them in enormous masses upon the banks, and depositing the water-logged trunks in the shallower parts of the river, a collision with which would probably result in the sinking of the canoe, from the liability of these craft to split. We progressed with tolerable rapidity, averaging about six versts an hour, rejoicing that stampedes were now things of the past, and that there was at least a possibility of some of our possessions reaching the journey's end unbroken. The river in its earlier course is very winding and Werchni Kamschatka, the next settlement we expected to reach, although only twelve versts from Sherowmy by land, is more than six times that distance by river. As far as our own feelings were concerned, however, we would willingly have prolonged it yet more, for weather and scenery were alike lovely. The river ran between pebbly banks lined with birches, whose white-barked stems contrasted with the brilliant gold of their foliage. Reach after reach of still water opened out to us its quiet beauty, and here and there a little gap revealed a Hobbema-like scene of sunny distance, whose clearness was unbroken by the waver of a single leaf. Far away in front rose a range of deep blue hills, jagged and peaky, patched only with snow, for their southern slopes had been thawed by the heat of the summer sun. The calm surface of the water was covered by little packs of duck, which rose in long lines as our rafts approached, and the smoke of our guns formed miniature clouds in our wake which hung motionless above the stream until the rounding of a corner hid them from our view. We paddled on silently, our natives talking but little. Now and again the warning *na pravo, na levo* (to the right, to the left) told of the neighbourhood of a snag, or a shallow bank necessitated the use of the poles; but for the most part our progress was one of uninterrupted quiet, and the laziest of Nature's lovers could have asked for nothing better than to sit and be paddled thus for the rest of his natural life.

We saw no four-footed game, with the exception of a couple of

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.
132 The current of the river is rather swift here and at Werchni, and
133 we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281 While at Melcova we tried to get some of the reindeer-skin
291 dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

000 resumed our journey down the river. We had hitherto only been able to buy one canoe, and in consequence were in need of four others with which to make our rafts. These they refused to sell us, but offered to lend them, together with men to take us on to Mashura, the nearest settlement, for fifty roubles! The silver rouble being nearly three and sixpence, and the distance only sixty versts—rather less than forty miles—we at once refused, regarding the demand merely as one of the common incidents of bargaining, and expecting it very soon to be considerably reduced. We were rather astonished that there was no sign of anything of the kind, and after waiting some time we had ourselves to return to the charge. In vain we threw the Ispravnik at their heads: we had a discussion of an hour and a half's duration, which at last ended in our agreeing to pay forty roubles, but under protest. At the same time we informed them that we should lay the matter before the Ispravnik on our return to Petropaulovsky.

It was two or three hours after sunrise before we got fairly under way. The weather was gloomy and cold, but with the exception of one heavy shower, we escaped without much rain.
133 Shortly after leaving Melcova the character of the river scenery
137 changes. For the first time on our journey we noticed the pine and spruce, and welcomed them with pleasure, as a relief from the wearisome monotony of poplar, birch, and alder. Here and there curious mud cliffs bank in the stream; often eighty feet or more in height, and nearly perpendicular.[1] The men begged that we would not fire while passing under them, lest a landslip should occur; and apparently with reason, for the soil appears to be constantly crumbling away, and little cascades of dust poured unbrokenly from the face of the banks as we paddled beneath. In one place we noticed a chalybeate spring welling up close to the water's edge, while others of pure water seemed abundant at the base of these earthy cliffs.

[1] These banks of reddish marl, known by the name of *yar*, appear to be not uncommon in Siberia. The town of Krasnojarsk on the Yenisei is thus named from their existence in the vicinity.

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Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

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Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

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of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

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If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

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000 regard to the price to be paid for the distance we had already gone, and when we eventually got off we discovered that we had lost five hours and a certain amount of temper to boot.

We floated silently down stream for a couple of hours or more, thinking over the discussions that, we knew only too well, would be renewed at the earliest opportunity, when, turning a sudden corner, we found ourselves face to face with a view that banished all thoughts of past and future annoyances in a moment. Before
133 us, eighty miles or more away, stood one of the grandest groups of volcanoes in the known world. Others there are, it is true, that are higher, although in most cases the elevation of the ground from which they take their rise detracts in no little degree from their apparent height. But here, from a base elevated scarce a hundred feet above the sea, a series of cones of the most exquisitely-symmetrical shape rose in heights varying from twelve to seventeen thousand feet. They were three in number. Nearest us was Tolbatchinska, dog-toothed in shape, with its apex on the western side, a long thin puff of white smoke drifting from its shoulder; and beyond, apparently in close proximity to one another, rose the twin peaks of Kojerevska and Kluchefskaya, perfect in their outline, —pyramids of the purest snow, before which one felt how poor was all language to express the sense of their perfect beauty. Snow mountains were no novelty to us. We had seen the Andes and the Alps, and had watched the sun rise on Cotopaxi, on Etna, on Fujiyama, and a dozen other mountains of equal note. But here all questions of comparison would have been a sacrilege, and floating noiseless over the unruffled surface of the river we sat
000 spellbound, drinking in the view. The sun sank slowly as we crept along, and slope and peak, at first a dazzling white, turned slowly to a glowing gold. On either hand the fast-approaching night had changed the glories of the autumn tints to a sombre shade of violet, and behind us the river was a mere streak of light. The bright glow of the fire upon the other raft lit up the bearded faces of our Russian guides around it, and when the daylight had

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000 early dawn, with the thermometer below freezing, struggling in an icy river with all one's furs on, but the unlucky bather was soon ashore, and a sharp rub-down at the camp-fire soon restored both his circulation and his equanimity. The day was once more bright and clear, and the distant peaks looked magnificent in the morning sun. As we drew nearer, the mountains opened out, and
133 the western slopes of Tolbatchinska no longer hiding Kojerevska, the latter volcano appeared, from this point of view at least, as a perfect cone of regular shape, which half concealed the equally regular and still higher peak of Kluchefskaya, the king of the volcanoes of Kamschatka. Other mountains too had come in view. To the north and west of Kluchi,[1] but in close proximity to it, the smoothly-rounded summit of Uskovska rose above the dark line of forest, and far away to the eastward two isolated and nameless cones of graceful shape appeared on the horizon, which, in spite of their eight or nine thousand feet, are recorded in no map.[2]

133 At this part of the river the conspicuous marl cliffs disappear,
137 and the pines are replaced by aspens, a tree of which we had
361 hitherto seen but little. Landing in the afternoon to take photographs and observations, we came upon quantities of the *cherunka* or wild cherry. The fruit is black, and of the size of a large black currant; very sweet, but with a peculiar sloe-like astringent after-taste. The delicious Scandinavian *moltebæer* we did not meet with, but our common raspberry and red currant are in some places plentiful. The latter fruit is, in our English gardens, scarcely worth eating, but in the wild state it is very sweet and palatable.

Eleven hours' steady paddling brought us, at 6 P.M., to three deserted balagans, without fish, and with nothing to indicate the presence of a human being save four canoes hauled high and dry upon the bank. We learnt that Tolbatchik, a village that we

[1] To the natives, with their love of contractions, the great mountain is thus invariably known.

[2] These we have since named Mount Gordon and Mount Herbert Stewart.

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133 expected to find here, is not situated on the Kamschatka, but upon
361 a tributary stream which joins the main river some forty versts lower down. There is a short cut overland, however, and we settled to camp and despatch Jacof Ivanovitch to the village at daybreak on the following morning for a fresh relay of men.
000 Close to the camp we shot a large blue hare, the pats of which were very much developed, and clothed with the thickest fur. This, curiously enough, was the only one we met with during the whole journey. The sunset was strikingly beautiful. The eastern sky was a deep purple, and the snowy peaks so bright a rose-colour, that no painter would have dared to transfer them to canvas. But the appearance of the weather was unmistakeable, and we set to work at once to dig deep trenches round the tents in anticipation of the coming rain.

The morning broke as we had foreseen. The wind had shifted to the south, and the rain descended with a steadiness that boded a long continuance. The dull leaden sky reminded us of our native land, and the heavy mist seemed to render even the inside of the tents almost as wet and chilly as the sopping grass without. The natives had retired to their tent, and Verglaski alone, slow and imperturbable as ever, seemed unaffected by the weather. Jacof had started early for Tolbatchik, and there was nothing to be done until his return. We went in search of birds, either for preservation or the pot, but hardly a living creature was to be seen, and a hobby, an owl (*Surnia ulula*), and a small thrush (*T. fuscatus*, Gm.) were the only specimens we obtained. The afternoon, however, was relieved from dulness by our natives, though in a manner that was anything but agreeable, for we found ourselves involved in a renewal of the endless wranglings and discussions of which we had already had more than enough. The Mashura men applied for their money, stating that they wanted to return. Four of them had gone back at Tschappina, but the other four had come on with us, and to these we tendered a sum exactly proportionate to that they had already received for the first part of their journey. This,

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000 rounded a corner, and the scene of our late squabbles was lost to sight. In justice to ourselves I should add that we deposited the money actually due to these men with the Ispravnik on our return to Petropaulovsky, but I believe that we should all have been glad to think that they never got it.

We had patched up our canoes as well as we were able before starting, and were glad to find that they made but little water, although the large, and as we had supposed, sound one, proved after all to be quite as leaky as the others. The weather, which had been gloomy and threatening, now showed some signs of improvement, and our spirits rose with the more promising condition of our surroundings. The size of our raft was against fast travelling, but we paddled steadily on, and had made forty versts before
133 camping for the night. At 6 P.M. we passed the mouth of the Tolbatchik River, coming in on the right bank; a tolerably deep stream with a breadth of about thirty yards at its junction with the Kamschatka. We held a consultation as to the possibility of going on all night, but the cold was so great and the passage down the river so risky from the snags, that we eventually decided against it. An accident to our raft in its present state would have been something more than a misfortune; it would have meant little less than absolute disaster.

136 eastern form of the Pied Wagtail (Kittlitz's *Motacilla lugens*) was extremely numerous; the Yellow Wagtail much less so. But of all the land birds the Kamschatkan Marsh Tit (*P. kamschatkensis*) was at this part of the river by far the most abundant. For two or three days we saw them in flocks of from fifty to a couple of hundred individuals, streaming northward along the bank from tree to tree.

133 Shortly after mid-day we passed the mouth of a river joining the Kamschatka on the right bank. The natives knew it as the Kojerevaka. It is a stream of some size, being apparently of considerable depth, and having a breadth of forty yards at its junction with the main stream. As far as we could gather, it drains the opposing slopes of the Tolbatchinska and Kojerevaka volcanoes.

We reached the little hamlet of Kojerevaky at nightfall. The distance from Tolbatchik, the scene of the last rows we had had with the natives, is only ninety-one versts instead of two hundred, and we might with perfect justice have reduced our payment to half of the sum we had promised. But, to tell the truth, we had become so wearied of the endless wranglings in which we had been involved in all our dealings with these wretched people that we paid them without a word. It was better to let them think that they had deceived us than for them to imagine that we had
262 weakly yielded to what we knew to be an imposition. We were
144 pleased to find that the Kojerevskans exhibited strong evidences of their Kamschatdale descent. We were received by the head-man, a little brown fellow with bright eyes; and under his direction the people did everything in their power to help us, carrying up our baggage, bringing us wood, and altogether showing us an amount of civility that was as new to us as it was agreeable. They provided us with wild cherries, cranberries, potatoes, turnips, milk, cream, and butter, and last, but by no means least, with a loaf of coarse rye bread, which, we heard, had been specially prepared for the Kluchi pope, who had been expected to pay the settlement a visit.

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823 We felt that we had got among friends once more, and managed by
133 the aid of all these luxuries to pass a very pleasant evening, in spite of the cold. At night the beacon flame of Kluchi, now brilliantly illuminating the clouds of smoke that hung around the crater, now sinking almost to extinction, shone out far above our heads. There was an angry look about the volcano, and we were told that its activity had of late been somewhat increased. The explanation was simple. The Kanuli, or Spirits of the Mountains, whose home is in the bowels of the volcanoes, had merely been more fortunate than usual. It is hardly necessary, in these days of omniscience, to explain that it is to these beings that all volcanic disturbances are due. They go to the sea at night to catch whales, which are their favourite food, and the roasting of several of these animals within the crater is, as may be imagined, an operation which requires the consumption of no inconsiderable amount of fuel.

000 The weather had become steadily colder from day to day, and as we turned out on the morning of the 11th September we regretted that the Spirits of the Mountains had not seen fit to do their cooking in closer proximity to our camp. Our moustaches were frozen to the blankets, and the water in the bucket inside our tent was a sheet of ice. Morning observations and photography are always interesting, but they are certainly best appreciated when the thermometer is well above freezing. The view from our camp was glorious, and the mountains, cloudless from base to summit, towered above us with the startling clearness of outline so charac-
361 teristic of northern regions. Kojerevsky—a village of ten huts and
133 sixty-three inhabitants—lies at the foot of Uskovska, a mountain of nearly 13,000 feet, whose summit from this aspect presents the appearance of a uniformly rounded dome of snow. It is in reality twenty-three miles off as the crow flies, but the giant scale on which Nature works in these regions belittles space to an extent that is inconceivable, until the hard facts of actual measurement are before one. A little farther to the south and east is Kluchi, whose sharp peak rises to a vertical height of 3¼ miles above the

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133 river, guarded on the right by Kojerevska, which is inferior to it in
361 altitude by fifteen hundred feet. To the extreme right lies Tolbatchinska, and above the intervening stretch of flat forest land the solitary peaks of the two isolated volcanoes I have before mentioned are visible some fifty miles away.

We had but little difficulty in getting the canoes requisite for

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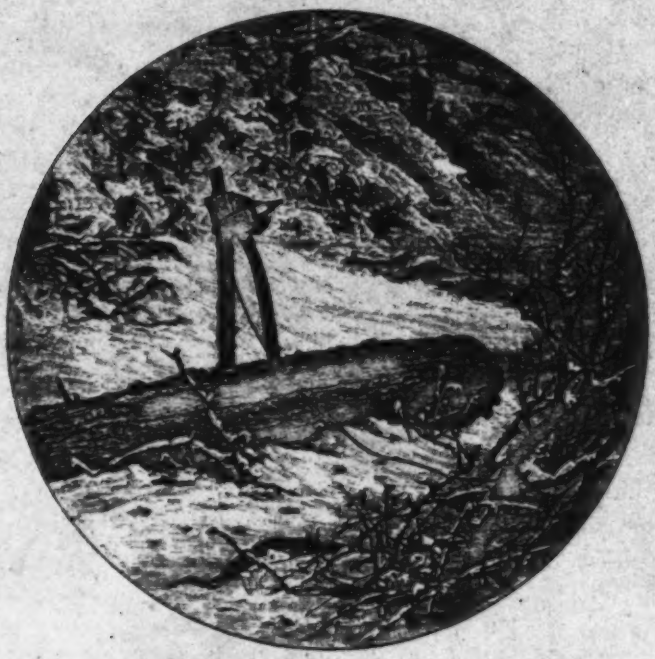

FOX TRAP.

constructing our raft upon somewhat less risky principles than the one that had, thanks to our good fortune, borne us the last seventy miles of our journey in safety. We reverted once more to our old plan of dividing forces, and late in the morning recommenced our voyage amid the firing of many salutes from the guns of the Kojerevskans, to whom we were really sorry to have to
000 bid adieu. At 4 P.M. we reached Uskovska, a hamlet containing

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000 that we could no longer continue our journey. Everything is comparative; and to our craft, with its low free-board and heavy load, the three-inch waves became more formidable than the heavy seas in a gale in "the Bay" appear to an ocean steamer. It would have been too absurd to founder in such a tea-cup storm, so we made for the shore, and set to work to cut down trees till we had to some extent restored the circulation in our limbs. An hour or two later the wind dropped, and we were able to proceed. We noticed the signs of some old forest fires near this spot, but they seem, happily, to be very rare. In Scandinavia, in a journey of the length that ours had been, we should have seen fifty or more. Here the great precautions that are taken against their occurrence are no doubt the chief reasons for their infrequency. Our hunters told us that the sables do not return to these spots for many years after, even if the forest has been but slightly injured by the fire.

361 Late in the afternoon we passed the hamlet of Kristovaky, or
133 Kristi as it was called by our men, and a few versts farther came
484 upon some people encamped upon the banks. It is curious how little the rivers are used as highways either during the winter or summer. The natives can hardly be said to travel at all, excepting in their winter excursions after sable. This was only the second party we had seen away from the settlements, and we were told that no one had passed down the river from Melcova that year. We shouted greeting as we passed, but there was no time to stop, as we wished to reach Kluchi that night. Our Kojerevsky men worked their paddles with a will, and before long we reached the mouth of the Yelofka River, a large stream, eighty yards or more in width, which joins the Kamschatka on its left bank. It flows due south, draining the western slopes of the great Sevelitch volcano, and is used as a road to Tigil, a settlement on the river of that name in the north-west part of the peninsula, which is, or used to be, a trading station of some importance to which the Koriaks
133 and Tchukchis bring in their furs for sale. The river is ascended by canoes for fifty or sixty miles, the watershed is then crossed by

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133 a march of two or three days' duration, and the traveller, striking the upper waters of the Tigil, reaches his destination by canoe.

At or about Kristovsky the Kamschatka, whose direction, roughly speaking, has been due north, bends suddenly to the east, and circles round the base of the stupendous volcanoes that guard its mouth. The aspect of the peaks alters considerably. Were not such a thing almost impossible, one would say that the scenery had increased in its sublime magnificence. Uskovska, Kojerevska, and Kluchi alone are visible, and of the two latter it is hard to say which is the finer. Kluchi is, and had been from every point from which we had hitherto beheld it, a cone of absolutely perfect shape, and Kojerevska is but little less regular in its outline. Now, as we advanced, the base of the latter was hidden in dense cloud, but its summit—a peak of extreme sharpness—stood out bare against the sky, the northern face a vertical wall of black rock on which no snow could rest. The river here is much increased in size, and is from three to four hundred yards broad. The depth is very uncertain, varying from a mere shallow intersected with deeper channels to twenty feet or more.

000 A few versts above the village of Kluchi four canoes pushed out from the banks and joined our party. Fully one-half of their occupants were women, who seemed to use the paddle with as great dexterity as the men. The boats were laden almost to the gunwale with the Kisuchi salmon, almost all of which were in good condition, though some had the peculiar rounded snout developed to a most extraordinary extent. One of the women—a most repulsive-looking creature—was dressed in man's clothes, but another had distinct pretensions to good looks, and ranging her canoe alongside, was soon deep in a flirtation with Afanasi, of whose reputation as a lady-killer we had all heard. The sun was setting as we rounded a corner, and came in sight of the village, its smoke hanging as a blue haze in the still evening air. To our left the Harchinska Mountains, furrowed with deep gorges, looked almost black against the amber sky. The huge cone of Kluchi caught the

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000 last rays of the sun and flushed a pale pink, while at the lip of the crater a fleecy puff of smoke hovered for an instant as if in doubt, and then floated out a long thin streamer to the east. Around his shoulders hung a thick belt of cloud, gathering rapidly with the fast-approaching night, and beneath, slope after slope rose steadily up to meet the pyramid above. Kojerevska showed here and there a patch of glistening snow through rifts in the dense veil that hid him from our sight, and on the lake-like surface of the river below our little fleet of boats paddled merrily homewards to the rough and mournful cadences of a Kamschatkan love-song. Suddenly the flame of the first salute shot out from the other raft, the signal for a general fusillade. It was answered by a flash and a report from the village; and a little later we stepped ashore at Kluchi, and were welcomed heartily by the head-man and a little crowd of the inhabitants.

133/137 361 The morning of September 13th broke with hardly a cloud; and the view of the mountains, which now lay nearly due south of us, was so magnificent that I did not hesitate to devote one of my last plates to it. We crossed the river in a dug-out, and landed on a sand-bank near the opposite side. The stream is here six hundred yards in breadth, and forms a fitting foreground to the picture. Behind the village, whose weather-worn huts line the banks for nearly a quarter of a mile,—for Kluchi may be regarded almost as a city in this part of the world,—the even slopes of ruddy vegetation rise smoothly upwards, till, at the height of two 133 or three thousand feet, the snow is reached. The outline of the mighty volcano was as perfect here as before, and its exquisitely graceful slope as unbroken. Near the summit, on the side immediately facing us, a deep furrow, as yet untouched by the rays of the morning sun, showed the remains of some past eruption—a huge scar which the snows of many winters had done their best to obliterate. From the crater light puffs of smoke drifted slowly away to the east, far whiter than the snow which lay below, for on all sides, and especially near the summit, a sprinkling of ashes had

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133 dulled its purity almost to a grey. The rounded half-dome of Uskovska to the west showed a vast field of unbroken snow, and on the side towards Kluchefskaya appeared to have been completely blown away by some great eruption in past years, leaving a huge open crater, the western walls of which alone were standing. The upper part of these, which was all that we were able to see, seemed to be almost vertical upon the inner face. Between the two mountains was a lesser cone, which, like Uskovska, appeared extinct. To us it was known as Little Kluchi, though whether we obtained this name from the natives or not I do not now remember.

The opportunity was an excellent one for taking further observations on the heights, the river forming a good base. We accordingly took advantage of it; and from the results of this and other work the following may be given as fairly accurate altitudes for the four chief volcanoes lying to the south of the lower part of the Kamschatka River:—

Kluchefskaya	16,988 feet.
Uskovska	12,508 „
Kojerevska	15,400 „
Tolbatchinska	11,700 „

Mount Gordon and Mount Herbert Stewart—the two volcanic cones lying to the south-east, to which I have alluded on a previous page—are probably both about 8000 feet in height.

It was late when we returned to breakfast, and found a visitor awaiting us. He was a poor old fellow nearly seventy years of age, who had spent three-and-thirty years of his life in this one spot, acting as a sort of doctor. What diplomas, if any, he possessed I do not know, but he seemed to have had sufficient ability at some remote epoch of his existence to have forgotten something. Half in dog-Latin, with a word or two of English, and half through Jacof and Afanasi, he gave us some few scraps of information. It seemed that three years previously—in 1879—

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133 an eruption of Kluchi had occurred. There had been no previous warnings, although the mountain is always more or less in a state of activity, but on the morning of August 14th, dense clouds of smoke appeared above the crater, and at mid-day the sky was as dark as night. Before long ashes began falling, and in a few hours the ground was covered with them to the depth of three inches. There was no earthquake, but, on the following morning, a small stream of lava poured from the lip of the crater on the north side. It descended but a short distance, however, and, shortly after, the mountain returned to its usual state of threatening quiescence. With this exception there have been no eruptions within the memory of man, or at least none of any magnitude. A few ashes often fall, and had done so not long before our visit, but the recent falls of snow had done much to hide them.

Kluchi appears to have been still more active in the middle of the last century. Krasheninikov, in the work I have mentioned, says that "it throws out ashes twice or thrice yearly, and sometimes in such quantities, that for 300 versts around the earth is covered with them to the depth of a vershoke (nearly two inches). From the year 1727 to 1731 the inhabitants observed that it burnt almost without interruption, but they were not under such apprehensions as in the last conflagration in the year 1737. This terrible conflagration began the 25th of September, and lasted one week with such violence, that to the people who were fishing at sea near the mountain it appeared one red-hot rock, and the flames which burst through several openings sometimes showed like rivers of fire with a shocking noise." On the 6th of October there was an earthquake of tremendous violence in the Avatcha district and the southern point of Kamschatka; regions which, it should be observed, lie in a direct line between Kluchi and the volcanic chain of the Kuril Islands. An enormous tidal wave occurred, "overflowing the shore 200 feet high," and killing many of the inhabitants; but the country in the immediate neighbourhood of the volcano did not appear to suffer much, although a violent

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133 earthquake was experienced at Nischni Kamschatka on the 23d of the same month.

In 1762 and 1767 outbursts again occurred, though of very much less severity, but subsequent to that time no accounts of other eruptions have, as far as I am aware, been published, with the exception of that of Professor Adolph Erman, who, in 1829, found the peak "in picturesque and sublime activity, and approached the burning lava, which poured forth a continuous stream," till he reached the height of 8000 feet above the sea.[1]

Upon the northern side of the Kamschatka River, 59 miles N.E. by N. of Kluchefskaya, rises the irregular mass of Sevelitch, of which we had hitherto seen but little. Its height is probably between ten and eleven thousand feet, but we were not able to take any measurements to correct this estimate. It is highest and most conical at its eastern side, and at the time of our visit was sending forth considerable volumes of smoke, which appeared to come from a crater low down on the south-west aspect, but owing to the extreme irregularity of the mountain, it was difficult to ascertain its exact position. Nothing indeed can be more striking than the difference between this volcano and Kluchi. The latter, with its wonderful steepness of slope and its unbrokenly conical shape, is probably one of the best instances that could be given of a mountain that owes its entire height and form to the slow piling up of the ashes and lava ejected from its crater. But in Sevelitch it is evident that the method of formation has been very dissimilar, and not of gradual occurrence, excepting as regards the secondary craters that have formed on the original mass. Hr. Erman, who passed several days on the mountain and the plains below, regarded it as having been forced from beneath the surface at a single eruption, since its bulk was composed of crystalline rock "resembling lava as little as the granitic rocks of the Alps." It would seem as if some giant power had upheaved the thin crust of the

[1] "Journal Roy. Geogr. Soc.," vol. ix. p. 509. In the map accompanying this letter, Uskovska is placed some miles to the south of its real position.

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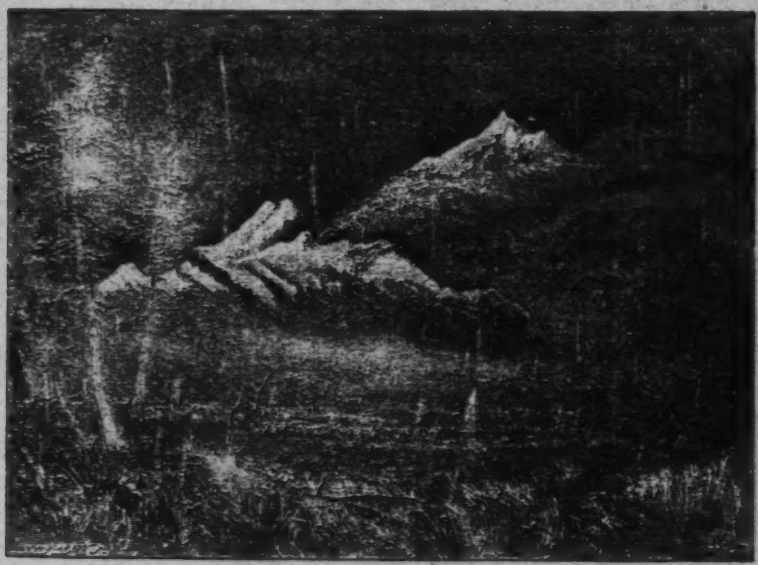
133 earth's surface, and that through the openings thus formed the liquid rock had poured, retaining the uptilted fragments in their new position.



SEVELITCH VOLCANO, FROM THE SOUTH.

About nine months after our departure from Kamschatka a series of eruptions appear to have taken place, which in grandeur must have rivalled those described by Krasheninikov in 1737. Of these no particulars seem ever to have been published, for two years later the very fact of their occurrence was unknown both to the Royal and Royal Geographical Societies. But, from the fact of their having been synchronous with the terrible catastrophe at Krakatau, they present features of such interest that I here quote the cutting of the "Japan Gazette," to which I am indebted for the only information I can obtain upon the subject:—

"THE JAVA ERUPTIONS.—We are indebted to Mr. T. R. Green, who has just returned from a prolonged journey in Northern Asia, for some highly

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133 interesting information respecting volcanic disturbances in that region. The particulars given, taken in connection with the recent volcanic eruptions in Java, seem to indicate that the active agency extended over an immense area. The disturbance of Mount Krakatau began early in August last, culminating on the 26th. At the beginning of July a cone, from 8000 to 10,000 feet high by estimation, not marked on the chart, but situate near the Kamschatka River, supposed to be inactive if not entirely extinct, suddenly split in two, emitting immense quantities of lava, which poured down its slopes. This phenomenon was not, however, accompanied by any very great local disturbance. Mount Siveluch (of Keith Johnston's map), the highest peak of the Kamschatkan range, 17,000 feet high, was in active eruption throughout the whole month of July, the pillar of flame in calm weather being distinctly visible at distances of from 200 to 250 miles; giving, after allowance for refraction, an altitude above the summit of the cone of 8000 to 10,000 feet. When the air was still, smoke, steam, etc., rose vertically to an elevation of 15,000 feet, where, meeting with a northerly air current, it abruptly took, at right angles, a southerly direction in a thin direct line. Captain Hubbard, of the M.R.S.S. *Toyoshimamaru*, recently described an eruption which took place at Shibotaru, one of the Kuriles, in the early part of June last. A copy of his letter addressed to Professor John Milne was, by the kindness of the latter, published in the 'Japan Gazette' of 30th June. Mr. Green further states that in April last the ice in the neighbourhood of the Kuriles was discoloured with volcanic ashes for miles in every direction, indicative of eruptions of unusual violence, probably in the north, but of which we have no note. Mr. Green was enabled to make some very interesting observations on cloud formations in the vicinity of the Kronotsky Peak. He describes this as, perhaps, the most perfect cone in the world, because it tapers to a fine point, and is of greater elevation than Fujiyama. At 2 A.M. to sunrise it would show perfectly clear and distinct from the sea like an unplumed cocked-hat. As the sun rose the snow would soften, evaporation no doubt begin, and mists would slowly gather around the summit, giving the mountain the appearance of a gigantic plumed field-marshal's cocked-hat. At daylight on the next morning there was not a vestige of the plume, but the process of its formation proceeded with unvarying regularity. This information will probably attract the attention of the Seismological Society. There certainly now seems an opportunity rarely offering for collecting and digesting the data respecting recent volcanic disturbances which should be availed of."[1]

[1] The above paragraph needs explanation. What the "cone not marked on the charts, but situated near the Kamschatka River" may be it is impossible to say, but

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133 did not serve in any way to render it less depressing. The village
137 appeared nearly deserted, and as there was nothing to detain us we resumed our journey without loss of time. Before noon we arrived at the Tchoaki (lit. cheeks). These are narrows about seven miles in length where the river passes through a range of hills from two to three thousand feet in height. Both entrance and exit are very sharply defined, and the stream, which above and below is about eight or nine hundred yards broad, is here narrowed to between three and four hundred. The scenery is decidedly picturesque after the monotonous miles of willow-lined banks that weary the traveller's eye in the lower part of the Kamschatka; and we were reminded somewhat of the Iron Gates on the Danube, which geographically—I do not say geologically—the Tchoaki closely resemble. But the former are on a grander scale, and the river here, in spite of its contracted width, exhibits none of the tumultuous rush of water which makes the passage of the Iron Gates so difficult to a Danube steamer.

000 In the Tchoaki we met two or three canoes coming up from Nischni Kamschatka, and learnt from them that a schooner, painted white, and with a steam launch, was lying at Ust Kamschatka—the settlement at the mouth of the river. This was a piece of information which astonished us considerably. That there should be a ship of any kind there other than the *Marchesa* was most improbable, for, as they told us, she was the first vessel that had visited the river for three years. More improbable still was it that she should be a stranger when the fact of her being painted white was taken into consideration; while the existence of a steam launch seemed finally to put the matter beyond a doubt. But on the other hand, the fact that she was said to have arrived many days before was greatly against it, and as the bar was very shallow, it seemed hardly likely that the *Marchesa*, with her draught of fifteen feet, would be able to cross it. The natives could not give us any further information, as they had not seen the vessel, and we were left in a state of doubt which no amount of discussion helped to enlighten.

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Emerging from the eastern entrance of the narrows we found ourselves passing through a flat, uninteresting plain which extended as far as the sea. Here the scenery is scarcely more interesting than that at the mouth of the Thames. A cold wind swept over the dreary reaches of the river, and behind us an ink-black sky gave warning of approaching bad weather. At 4. P.M. we passed Nischni or Lower Kamschatka, once the capital of the peninsula, a village of some importance with twenty houses and a church, and a population of 150. It lies a little way off the main river upon a smaller stream, and just opposite, upon the other bank of the Kamschatka, the Raduga, a river about forty yards wide at its mouth, flows in
000 from the south. A canoe shot out to intercept us as we passed, bringing a letter for Petropaulovsky from the Kluchi pope, who had left that village just before us on the preceding day, and shortly afterwards we saw another boat paddling hard after us. We stopped to let it approach, and soon recognised Jacof, whose gloomy face told us that Verglaski had not been found. He had apparently gone down the river for some distance, and had then turned back and proceeded towards Kluchi. Here the track had become obliterated, and Jacof had been obliged to give up the search. Poor old Verglaski; his quiet methodical ways had endeared him to all of us, and Jacof was much distressed at his loss. In the summer he would have had no difficulty in finding enough to subsist on, but at this season hardly any fish were left, and the settlements being so far apart, and upon the other side of the river, it was more than doubtful if he would ever have a chance of reaching one of them.

Paddles were once more resumed, and we were discussing the advisability of proceeding to the mouth of the river without stopping, when we perceived the smoke of a steam launch in the distance. By our glasses we soon made her out to be a stranger, and all doubts as to the arrival of the *Marchesa* were thus at an end. She proved to be the launch of the walrus-schooner *Nemo*, bound to Nischni Kamschatka. She had on board the first officer—

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136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 252 262 The natives are prevented by law from barring the river in the lower part of its course, and here the salmon are taken chiefly with seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 224 The low and muddy shores of the river in this part of its course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

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133 WE WERE ON THE MORNING OF SEPTEMBER 15TH TO A MOST MISERA-able day. We had not dug the trenches round our camp unnecessarily; the rain was coming down in torrents with a bitter wind, and we deferred our start till nearly noon. After four hours' paddling, the river, which here averages from twelve to fourteen hundred yards in breadth, widens still further opposite to the entrance of the arm leading to the Nerpitchi Lake, and sweeps round sharply to the south. Just beyond lies the village of Ust Kamschatka, in the dreariest situation it is possible to conceive; and here, cold and tired, we pulled up at 5 P.M. and established ourselves in a comfortable little hut belonging to Mr. Phillippeus, the fur-trader. Our journey was practically at an end, for we were but four miles distant from the bar at the mouth of the river.

A small look-out tower is built a little to the south of the village, and we at once ascended it to see if there were any signs of the *Marchesa*. Nothing was to be seen at first, but before long we made her out approaching from the south; and thus, after an absence of a month, we had hit off the time of meeting with an exactness as curious as it was fortunate. We were anxious to get off without delay, and the captain of the *Nemo*, with whom we had made acquaintance, offered to take us. We were soon afloat in his whaler, which was manned by a Japanese crew, and with the oars double-banked, we got over the water at a pace that was somewhat different to that to which we had been accustomed on the rafts. As we neared the river's mouth the thunder of the surf was not reassuring, and we landed to reconnoitre on the left bank, where the river, making a sharp turn before debouching into the sea, runs close to and parallel with the beach. Our men, who had preceded us with the baggage, had made a large fire of drift-wood, of which we were glad enough to take advantage, for our teeth were chattering with the cold, and the rain had recommenced. But what we could see of the bar through the darkness was not such as to induce us willingly to attempt it, and we at once decided to return.

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000 attempted it on the previous night would have been foolhardy in
133 the extreme. 1At ordinary high tides it appears that there is between ten and eleven feet only in the deepest part, and R—— told us that he had had a narrow escape in getting the *Nemo*, which had a draught of ten feet six inches, into the river. She had bumped heavily once or twice. The entrance shifts constantly, and in bad or indifferent weather the bar is doubtless a very dangerous one. We arrived at the best time of the tide,[1] and were fortunate enough to get over the three big waves without even a wetting. A few minutes later we boarded the *Marchesa*, after an absence of exactly a month. We found all well, and the day passed quickly in chatting over our various adventures. The Swedes bade us adieu towards evening, and the sun was setting in a blaze of gold behind the giant pyramids of Kluchi and Kojerevska as we fired a farewell gun and stood away for Bering Island.[2]

[1] It appears that there is only one tide here in the twenty-four hours.

[2] I have adopted this, the correct orthography of the celebrated navigator's name, instead of the more usual Behring, a piece of bad spelling which, I believe, we originally borrowed from the Germans.

[at the mouth of the Kamchatka River--
analyst]

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CHAPTER X.

KAMSCHATKA.

000 Cape Klin—Walrus—Permanence of snow at the sea-level—Betchevinskaya Bay—Hunting *Ovis nivicola*—Impassability of the bush—A magnificent bag—Description and measurements of the Kamschatkan Bighorn—Natural breakwaters—Seals and bears—Lost in the bush—Return to Petropaulovsky—Unveiling of the monument to the affair of 1854—Ship's pets—Leave Avatcha Bay for the south coast—An otter-hunters' village—Method of killing the sea-otter—The peoples of the peninsula—Lamuts in Kamschatka—We leave for Japan—South-easterly gale—Encounter a typhoon—Loss of Le Gonidec—Another gale—Repair damages in Yokohama.

133 THE eastern shores of the peninsula of Kamschatka are broken by three well-marked promontories:—Capes Kamschatka, Kronotsky, and Shipunsky; and it was for the latter—the southernmost—that we shaped our course. Our friend R——, the captain of the schooner *Nemo*, had recommended this part of the coast as being the best ground for wild sheep and walrus, and though he had himself hunted it on his voyage to the mouth of the Kamschatka River, we hoped that a sufficient time had elapsed for the animals to have returned to their old quarters. Nearing the land a little to the north of Cape Shipunsky, it soon became evident that the outline of the chart of this part of the coast had been traced according to the fancy of the cartographer. Instead of a nearly straight shore devoid of dangers, we found ourselves at the entrance of a fine bay nearly two miles in depth, running in a south-westerly direction. The scenery was wild and lonely-looking to a degree, but the jagged precipices and rocky islets of which it was in great part

133 composed were less pleasing to a sailor's than an artist's eye; and it was with a certain relief that, on the return of the lifeboat we had sent to coast the shores of the bay, we learnt that no trace of walrus was to be seen. With the prospect of bad holding-ground and no shelter to speak of, we resolved on trying farther to the north, and therefore, without anchoring, made at once for Cape Klin, our original destination.

We kept within a mile or two of the land, expecting to arrive in an hour or less, for the distance between Capes Shipunsky and Klin was barely twelve miles by the chart. We found, however, that the distances were as little to be relied on as the outline of the coast, and we had logged thirty-six miles before stopping the
000 engines abreast of the cape. We rowed along the beach in vain in search of the game. Not a walrus was to be seen, but on nearing a little group of rocks we noticed a large mass lying upon the beach, and landed to find ourselves in the midst of a scene of slaughter which sufficiently accounted for the absence of our quarry. The crew of the schooner had evidently had good sport, for the shore was dotted here and there with the bodies of the slain, which were blown out to a gigantic size by decomposition. That there were still plenty of walrus in the neighbourhood was evident, for on our return to the ship the animals played in numbers around the boat; but, unlike the fur seal, they will not "haul up" on the shores where others of their species have been killed, and we had therefore to give up all hope of obtaining them at Cape Klin. The walrus restricts itself more or less to certain favourite spots for landing, and a random search for them along the coast would have been attended with but little success. It is nearly impossible to kill them in the water except by harpooning, for the only fatal shot—a small spot at the nape of the neck—is very rarely obtainable, and the animal, if struck there, usually sinks at once.

132 Our search having thus proved fruitless, there was nothing left
133 for us but to return to the neighbourhood of Cape Shipunsky, in the hope of obtaining some of the bighorn or mountain-sheep

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132 which, according to Jacof Ivanovitch, were to be found there in
133 abundance. A few years previously he had visited Betchevinskaya Bay, a deep inlet ten miles to the west of the cape, and had shot several; and since, according to his account, both anchorage and shelter were to be had—a not unimportant consideration on such a coast—we again steered southward, and keeping a good offing during the night, ran in to the land and picked up our position off Cape Shipunsky at daybreak. The coast is steep-to, and as we passed close to the fine cliffs and headlands which oppose the by no means tranquil Pacific, there lay the *neiges d'antan* bewailed of Maistre François Villon,—huge patches of last year's snow, choking the gullies down to the water's edge. That they should have remained throughout the hot summer in a south-east aspect was astonishing, and gave some idea of the severity of the climate in these latitudes, but the absence of the usual autumnal rains no doubt in great measure accounted for it.

133 Before reaching our anchorage just within the entrance of the
137 bay, we could distinctly make out small herds of the animals of which we were in search on the slopes of the cliffs, which here rose to a height of five or six hundred feet, precipitous in some places, but in others forming a sort of under-cliff covered with brushwood. We lost no time in settling our plan of action. Judging that the bighorn were confined to the promontory near which we had anchored, we resolved upon surrounding it, sending four guns to the top of the cliff, whose sea-face extended east and west for a distance of about three miles, and posting two others upon the beach below. The former, ascending in rear from the shores of the bay, reached their destinations with some difficulty, the undergrowth being so dense and strong that, but for the bear-paths with which it was cut up in all directions, it would have been impenetrable. At the edge of the cliff progression was somewhat easier, and on looking over we found ourselves in close proximity to the game.
000 Owing to the excitability of Jacof, who had got some distance ahead, we began the day in a manner I hardly like to recall. The

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136 Bolcheresk Valley, and it probably exists at low altitudes on the great volcanoes near the mouth of the Kamschatka River. Every one of those we shot was a male,—their ages ranging, as far as we could judge, from three to six years. They kept in small herds of from three to nine individuals. As in the case of others of the same genus, the females and young males doubtless keep apart, but we were not fortunate enough to discover their habitat, neither could we obtain any information about them from the natives.[1]

Early next morning the most enthusiastic of our party proceeded in the lifeboat to the ground of the preceding day, hoping to add still further to the bag, while two of us started to explore the
133 magnificent harbour at the entrance of which we lay. Betche-
136 vinskaya Bay, the position and extent of which is but roughly indicated in the Russian charts, is a narrow inlet some five miles in depth, girt with precipitous cliffs of three or four hundred feet for the seaward third of its extent. At this point two low and narrow strips of beach run out from the base of the cliffs on either side, leaving a passage barely fifty yards in width in the very centre of the fjord, but deep enough to admit a vessel of the largest size. Within this the cliffs disappear, and an extensive and perfectly land-locked basin is entered, surrounded by high hills sloping gradually to the water's edge—as good a harbour as it is possible to imagine. Of the mode of formation of the two promontories I have just alluded to I can offer no explanation. They are so unnatural in appearance, and so closely resemble artificial breakwaters, as at once to attract the notice of the most careless observer. The long spit of beach running out at the entrance of Petropaulovsky harbour is of exactly similar formation, and the same phenomenon is said to occur at other places along the coast. Nature is not very lavish of her harbours on these shores, but the few that exist are excellent.

As we entered, the placid surface of the inner basin was dotted in every direction by the square black heads of seals, of which

[1] Cf. article by the author *On Ovis nivicola*, "Proc. Zool. Soc.," 1885, p. 675.

22: Guillemard T-2 (1882) 1886 Kamchadal

133 there appeared to be enormous numbers. But as we intended to
136 try for bear at the head of the bay we left them in peace. The wind, however, sprang up and blew directly inland, and all chance of sport being under these circumstances reduced to a minimum, we reluctantly returned. That bear were very abundant in the neighbourhood was evident from the numberless fresh tracks, and from the fact that we saw seven in two days, but owing to their shyness and the dense undergrowth they frequent, they are not easy to shoot. We had therefore to turn our attention to the seals, whose skins Jacof seemed anxious to obtain. They were the ordinary *Phoca vitulina* of our own coasts, or a very closely-allied species.

Landing on the natural breakwater on our way back, we were astonished to find a spring of fresh water close to its extremity. The pools formed by it were covered with teal and other duck, and with these and a stray golden plover or two we had good sport. The place seemed to be a favourite resort of bears, who had formed
000 numerous paths to the spring; but ill-fortune once more attended us, and we had to be content with a distant view of one of these animals, who made off at full speed. We returned to the *Marchesa* to find that considerable additions had been made to the bag by the other party. Four more *Ovis nivicola* and a walrus had been killed, the latter carrying very fine tusks, nearly two feet in length. Hunting these creatures is after all but a sorry business. In order to afford sport an animal should either fight or run away. The poor walrus does neither—at least to any purpose—and having once killed one, no sportsman would care to repeat the performance.

I have been led to describe the events of our two days' visit to Betchevinskaya Bay as an illustration of the abundant sport to be obtained in Kamschatka. Our total bag consisted of one walrus, fourteen bighorn (one, falling in an inaccessible place, was not brought in), and some seals, besides teal, duck, and golden plover. Had we been ordinarily fortunate we should also have obtained two bears, which, though badly hit, managed, owing to the

22: Guillemard T-2 (1882) 1886 Kamchadal

000 Long before the huge paw had descended in a futile effort at revenge the little rascal was safely under cover, on the look-out for another opportunity, and the bear might just as well have attempted to catch a mosquito. A more thorough little pickle never existed, but, like all pickles, he was very popular, and when one morning he disappeared never to return there was great lamentation among our men. We never learnt his fate. Probably Misky had caught his tormentor after many months of vain endeavour, and had dined off him.

We left Petropaulovsky on September 26th with the intention of visiting the coast towards Cape Lopatka. Even as far south as Avatcha Bay the nights had become bitterly cold, and warned us to take our departure if we meant to avoid the heavy gales that visit these latitudes at the onset of winter. We steamed out of the harbour over a sea so calm that the glare of golden light which lit up the western sky was reflected in its surface as in a mirror. Never had the bay and its grand volcanoes looked more beautiful, and we stood watching the blaze of colour fading over the yellow birch-clad hills and the lonely pyramids of snow beyond until the last ray of daylight had disappeared and the full moon had turned the landscape to a harmony in black and silver.

361 Next morning a thick fog hid the coast from view, but cleared
133 as the sun got up, and we were able to pick up our position. About
501 noon we found ourselves off an island abreast of the Itterna Volcano, and steaming into a bay close by, we scanned the coast for signs of a sea-otter-hunters' village, of whose existence we had heard through Afanasi. Not a trace of it was to be seen, and we were beginning to think that we had misinterpreted our directions when a couple of little canoes shot out from behind a point and paddled towards us at a great rate. As these neared the ship we saw that they were built somewhat on the model of a Greenlander's *kayack*, although not broader than the narrowest of Thames cedar-wood canoes. How they can live in any ordinary sea is little short of miraculous, but we afterwards learnt from the people that two

22: Guillemard T-2 (1882) 1886 Kamchadal

501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

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102/133

24: Lansdell--634-635 M-2 (1879) 1882 Kamchadal-I-3
116, 131, 133

"The traveller who, from Okhotsk, wishes to visit Kamchatka may reach Petropavlovsk by sea through the Kuriles, or continue round the coast by road. The latter course takes him through Yamsk to Ghijiga, at the north of the bay, a distance of 1,100 miles. He then descends along the western coast of Kamchatka to Tigil, 760 miles further, at which point he strikes inland to a valley lying below active volcanoes, and so reaches Petropavlovsk, on the shore of the North Pacific, a land journey from Okhotsk of 2,540 miles, accomplished by deer, horses, and dogs.

Kamchatka is so called after the name of its principal river. The peninsula is 800 miles long, and from 30 to 120 miles wide; its total area being about 80,000 square miles, or five times the size of Switzerland. The southern extremity, called Cape Lopatka, is a low, narrow tongue of land, which, as it proceeds northwards, widens and rises into rocky and barren hills, with small valleys timbered with willow and stunted birch. Two degrees north the range divides, one portion running nearly due north and the other taking a north-easterly direction. In the fork formed by these two chains lies the valley of the river Kamchatka. The western chain rarely rises above 3,000 feet, but the eastern chain has many high volcanoes, among them Kluchevsky, which is somewhat higher than Mont Blanc, and not far from the sea. (1) [635]

1. Many ranges of terraces and secondary summits surround the mountain

as with an enormous pedestal, so that its base has a circumference of not less than 200 miles. The fissured summit constantly smokes, and twice or thrice a year throws out cinders. Ashes and dust have sometimes been carried to a distance of 180 miles, and covered the ground many inches deep, preventing the Kamchatdales from sledging. An eruption in 1737 ejected much lava, and this, dissolving the glaciers, poured into the neighbouring valleys a deluge of waters. In 1854 an other stream of fire descended from Mount Kluchevsky. From the crater of the Avasha, immediately behind Petropavlovsk, have been thrown at the same time stones, lava, and water. The following are some of the active volcanoes: Korakovsky, 11,200 feet; Chevelutch, 10,529; Jupanof, 8,478; Avatcha, 8,344; and the Great Tolbach, 7,618; Whilst, of the extinct volcanoes, Uchkin is the highest, with an elevation of 10,977 feet.

Earthquakes are more frequent, perhaps, in Kamchatka than in any other country. The number of shocks felt at Petropavlovsk averages eight annually. (1)

1. Mr. Hill describes one lasting no less than eight minutes. During the whole of this time rumbling and loud noises were heard beneath the ground,

24: Lansdell -634-635 M-2 (1879) 1882 Kamchadal-3
116, 131, 133

and the earth trmbled violently. Some of those who experienced it said they thought at one moment that the earth was sinking beneath them, and the sea about to rush in upon the land, and the next that they were rising upon the crust of the crater of a volcano in terrible eruption beneath the ground."

24: Lansdell--635-636 M-2 (1879) 1882 Kamchadal
116, 133, 757

"About 50 miles west of Petropavlovsk is a remarkable warm spring, into which when you enter, says Mr. Collins, the sensation is as if the skin would be [636] removed, whilst the stones and mud on the bottom fairly burn the feet, added to which the steam and gas, ascending from this natural caldron, fairly take away the breath. In a short time, however, bathers become red like lobsters, and find the temparature enjoyable. The water is very buoyant. It is used by the natives for all sorts of deseases."

24: Lansdell-638 [2] M-2 (1879) 1882 Kamchadal
116, 133, 161, 226, 361

" The number of the Kamchatdales, strictly so called, is estimated at 3,000. Their capital is Petropavlovsk, the only town on the eastern coast of the peninsula. (1)

1. It is situated on the right shore of the splendid Bay of Avatcha, which may claim with Rio Janeiro and San Francisco to be one of the finest harbours in the world. It is perfectly protected from the winds, and, transplanted to a more favourable position, it might be one of the greatest of markets; but since the fishery of the whale in the surrounding seas has lost its importance, Petropavlovsk has sunk from a place of 1,000 inhabitants to one of 500. Mr. Dobell, who lived in the peninsula five years, says that he found there many dykes and mounds, from the existence of which he argues that the country was once thickly populated."

27: Sauer--214 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"We passed the winter [CMC: 1790-1791] in excursions of pleasure, and in dancing and card parties, chiefly at Bolshoiretsk, where the luxuries of life are more plentiful than in the harbour of St. Peter and St. Paul. The frost was sometimes very severe, and we had for a few hours 21° below the freezing point of Reaumur. Two or three earthquakes happened about the neighbourhood of Neizshni; but, except a slight shock on the 21st November at noon, none of them reached the harbour of St. Peter and St. Paul.

...

...

By the 1st of May the bay of Avatska was clear of ice, and not before, owing to the feverity of the winter: but the inner harbour of St. Peter and St. Paul remained frozen up."

27: Sauer--285-287 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 787

"On the 11th August [CMC: 1792] in the harbour of St. Peter and St. Paul, I observed a number of swallows flying about, apparently much [286] frightened. They were red breasted, a species never remembered to have been seen here; and the inhabitants immediately predicted some remarkable event; they were, however, only seen during the morning. The next morning, about five o'clock, we were alarmed by a violent shock of an earthquake, preceded by a rumbling noise, little short of thunder. The motion of the earth was undulatory for nearly the space of a minute. I was dressing myself, and was thrown down, which induced me to get out of the house as quickly as possible. The water in the bay was agitated like a boiling cauldron. The shock came from the north-east, and appeared to me to continue upwards of two minutes; but other gentlemen were of opinion that it did not last more than one. A sailor, one of the watchmen on board the ship, was thrown out of his hammock. At Paratounca it was more violent; the earth opened in many places, and water and sand were thrown up to a considerable height; all the buildings in the village were more or less damaged; one balagan was thrown down; some of the ovens (the only brick-work about the buildings) were also shaken in; and all the paintings, &c. in the church, except Captain Clerke's escutcheon, were thrown from their fastenings.

At Neizishni Kamtshatka the inhabitants were extremely terrified; nor could they explain whether the noise or the shock preceded. The situation of the town is on a neck of land formed by the discharge of the Raduga, a considerable river, into the Kamtshatka;

the bed of the former was dry, and the inhabitants ran across it toward the mountains. They, as well as the cattle, were thrown down; and the continuance of the trembling was, according to their account, near an hour; the earth opened in many places, and sunk considerably in some. The volcano Klut-[287]shefskoi emitted a vast column of black smoke; a noise like thunder seemed to issue from the bowels of the earth; the bells of the two churches rang violently; and the howling of the dogs, and screams of the people, surpassed all description, for the latter expected every moment to see the complete destruction of the town. But when the shock was over, the lost water of the river resumed its former channel, and the inhabitants returned to their dwellings. Not a single brick chimney or oven was left standing. The altar of one of the churches was separated from it about a foot, inclining a contrary way; and the greater part of the balagans were thrown down.

It is remarkable, that the inhabitants of the village at the foot of the burning mountain only heard the noise, and did not feel the shock; nor did it cross the mountains to the western shores of the peninsula."

27: Sauer--289-290 T-2 (1789-93) 1802 Kamchadal
116, 133, 137

"I shall commence my description at the southern extremity [CMC: of the Kamchatka Peninsula], which the Russians call the Lopatka, latitude 51°, longitude 156° 40', east from Greenwich; a low point of land, widening and rising gradually into mountains, barren and rocky, only producing here and there the creeping cedar and willow, to the extent of 40 miles. Birch trees then appear in the inconsiderable vallies, which are replete with lakes and runs of water rushing into the sea both east and west. A cluster of mountains occupy the whole space from the Lopatka to latitude 53° 5', where, in the neighbourhood of the village Malka, they divide into two branches, one trending north north-west; the other, which may be called the principal chain, leads north north-east. The place where the mountains separate is the highest land on the peninsula, and forms a barren stony desert of 65 miles in length, in a direction north and south, and from 3 to 15 in width, producing in detached spots brush-wood, willows, and a very few scattered and stunted birch-trees. It is replete with springs and [290] brooks; some of which uniting, and flowing south and south-west, form the Bistrea; while others, at only a few fathoms distance, take an opposite course, and are the sources of the river Kamtshatka. At the end of this desert, the mountains close within a mile or two, and a forest of birch-trees follows to the village Apoushinsk, where the river Kamtshatka is navigable for small boats to its discharge."

27: Sauer--290 T-2 (1789-93) 1802 Kamchadal
116, 133, 134, 135

"From this place [CMC: i.e., north of the village of Apoushinsk, from which point the Kamchatka River is navigable by small craft] the face of the country assumes the appearance of extreme fertility. The valley widens, and the space between the mountains east and west is at Virchni Kamtshatka 40 miles. The soil is deep and rich, composed of black earth, mixed with fine black ashes from the burning mountains, and fine iron sand, which adheres to a magnet, and forges well with bar-iron, but used alone is very brittle."

27: Sauer--290-291 T-2 (1789-98) 1802 Kamchadal
116, 132, 133, 137, 824

"The productions of nature [CMC: in central Kamchatka] are, a small kind of wild black cherry (tsheromka), in great abundance; the wood of which, being particularly hard, is used by the Kamtshadals for their guiding sticks to the sledges: the thickest trees that I have seen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary size, with birch, poplar, asp, and mountain-ash, clothe the mountains to their summit. The underwoods are, currant, dog-rose, hawthorn, alder, and bushes producing berries.

The climate is very different from that of the southern and northern parts of the peninsula, the valley being completely sheltered from the sea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The scenery is beautiful beyond description, [291] the river meandering through the midst of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every species of salmon in the season. This valley is 180 miles in length, frequently opening prospects of the Tolbatshinsk, a lofty double-headed mountain, constantly emitting an immense column of black smoke; while the second volcano, Klutshefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand."

27: Sauer--292 T-2 (1789-93) 1802 Kamchadal
116, 133, 137, 361, 563

"At Tolbalshinsk [CMC: mountain] the mountains are broken and barren; they encroach upon the valley, and considerably lessen its width. Storms are frequent between this volcano and that of Klutshefskoi, but never reach the neighbourhood of Milhovoi, and the trees are considerably less in size; but the country continues fertile as far as 30 versts north of the village Klutshefskoi, which is also a colony of Siberian peasants for the same purpose as those at Milkovoi, and who act in the same manner [CMC: see category 563, this source, p. 291]. Their proceedings are in some respects justifiable; for the magistracy at Neizshni exact the same payment from them as from the residentiary merchants. The court of justice conflicts of a burgo-master, four members, or rathmen, a secretary, writers, and watchmen; receiving a salary for the time they are in service: and frequently an expensive deputation is sent to Tigil, Bolshoiretsk, Virchni, and such places as are reported to by these pedlars; so that it is a matter of doubt with me, whether the culture of the earth would render any harvest sufficient to answer the payment of their claims. In some years they amount to 18 or 20 rubles, and in others half as much more."

27: Sauer--292 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"As you approach the north [CMC: of the Kamchatka Peninsula], the severity of the climate increases; the soil becomes sandy and stoney; and the vegetable productions are stunted and weak. The isthmus is situated in latitude 59° 20', and the distance from sea to sea is here about 40 miles. The widest part is from Kronotskoi Noss to the river Itsha, about 220 miles."

27: Sauer--293 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The western coast of Kamtshatka is uniformly low and sandy, to the distance of about 25 to 30 miles inland, where the mountains commence. It produces only willow, alder, and mountain-ash, with some scattered patches of stunted birch-trees. The runs of water into the sea from the mountains, do not deserve the name of rivers (except the Bolshoia Reka), though they are all well stocked with fish from the sea in season, as trout and different species of salmon. They are generally at the distance of 15 to 20 miles from each other. The Itsha and Tigil are the most considerable; and neither of these have a course, with all the windings, of more than 100 miles.

The sea is shallow to a considerable distance; and the commanders of the transport vessels, who never lose sight of the exposed coast if they can help it, judge of their distance from land, in foggy weather, by the soundings, allowing a fathom for a mile; nor is there at the entrance into any of the rivers more than six feet at low water, with a considerable surf breaking on the sandy beach."

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-1-3
116, 133

"The eastern coast is composed of mountains, rocks, rugged cliffs, and bold promontories, replete with inlets, and the appearance of such. Their entrance, however, is blocked up by reefs of rocks, the openings of which are only to be entered by the boats of the natives. Immense masses of stone are scattered out at sea to the distance of one two, and three miles; some of them being only discernible by the breakers, while others tower to a considerable height. The depth of the sea varies much, and suddenly, from 30 to 90 fathoms, and more. Earthquakes are frequent, and sometimes very violent.

The only harbour for ships on the whole peninsula is the Bay of Avatsha, which is probably the safest and most extensive in the world. I shall exert my utmost ability to describe this place; but fear that I shall scarcely be able to do it justice.

I will suppose myself approaching the coast from the south-east. When first seen, it appears strait and uniform, without bays or inlets; the land rising into moderate mountains, backed by such as are more lofty. Three of them, apparently united, [295] are very conspicuous to the north of the Bay, the farthest, or the most western is the highest and is conical; the next is a volcano, distinguishable by a column of smoke issuing from its summit, which is broken; the third presents several flat tops, lowering, and trending east, from which a narrow and lofty broken and irregular point of land extends about 15 leagues, terminating in a promontory called Sheeponskoi Noss. South of the bay are two remarkably lofty mountains; that nearest the entrance (Vilnitsheskoi Sopka) is formed like a sugar loaf; the other, Apalskoi, is far inland, not so lofty, and is flat on the top.

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-2
116, 133

On getting well in with the land, it is high, craggy, and broken, presenting the appearance of inlets. When about the latitude of 52° 45', and longitude 159° 15', the entrance into the Bay of Avatsha discovers itself, bearing north-west by west; south of which, at the distance of about four miles, is a small round island, composed of high pointed rocks, called Staritshkovoi Ostrov. The north cape is a bluff head, with a light-house on the top of it, resembling a centinel's box. From this cape eastward, to the distance of three miles, breakers are discernible over hidden rocks, which extend to the south about half a mile. Within the channel, are three detached needle rocks near the north side: on the opposite shore a single one remarkably bulky, the top of which is nearly flat. Soundings lessen from 40 to 12 fathom, over a stoney bottom; and 10 fathom in the channel, sand and mud.

The entrance is in latitude 52° 51', longitude 158° 48', whence Sheeponskoi Noss bears east north-east, distant about 17 leagues. It forms a channel in a direction north north-west four miles deep; the breadth is three miles in the widest, and two in the narrowest part; both shores rocky; the summits covered with birch trees, mountain-ash, and hawthorn. Having passed this [296] channel, you enter a most magnificent basin about 25 miles in circumference, completely land-locked, and every where (except the north-west extremity) high, and covered with trees. As we advance in the basin, commodious harbours open: to the east, Rakivinoi, about three miles deep, and three quarters of a

27: Sauer--294-296 T-2 (1789-93) 1802 Kamchadal-3
116, 133

mile wide. The south cape is a lofty perpendicular mass of stone. Shoal water over rocks extend from the shore into the bay, about 50 fathoms from south to north, which makes the entrance difficult. The north cape is a high rocky shore, with some rocks that are detached; but these are visible, and not of any extent; the depth within is from 13 to 3 fathoms."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia.
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]: its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636.71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

27: Sauer--297 T-2 (1789-93) 1802 Kamchadal
116, 132, 133

"The harbour of Tareinsk opens to the west: the entrance is about one mile in length, when it suddenly turns to the south-east, extending twelve miles in length, and three in width: the depth is from six to eight fathoms, mud and sand. A narrow neck of high land at the bottom, like an artificial partition, separates it from the sea. This harbour, although extremely convenient in its construction, is not so in its situation; as an easterly wind is absolutely necessary to bring outward bound vessels into the bay of Avatsha where it is quite contrary; besides, it is exposed to the north and north-west winds, which blow over the plains of Avatsha right into it, and keep it blocked up by ice till late in the season."

27: Sauer--298 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137, 161

"Near the mouth of this harbour [CMC: of Tareinsk in Avacha Bay], on its north-west borders, is a valley forming a plain of about one mile and a half square, well wooded with good sized birch trees: a situation which Major Behm thought the most eligible of any hereabouts for a town. North and south are lofty mountains of easy ascent, covered with trees to their summit. The valley is bounded to the west by a fresh water lake of about 15 miles in circumference, well stocked with fish all the year through; while its borders abound in different kinds of berries, sarana, tsheromtsha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief source of the river generally known by the name of the Paratounca, of which I shall shortly give an account, as also of the other rivers. The remains of numerous villages in the vicinity of this lake strongly indicate the former popolousness of these parts; but they are at present overrun with bears, wolves, and hares."

27: Sauer--300-301 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The plains of Avatsha, which bound the bay to the north-west, extend 18 miles from east to west, and 35 miles from north to south, producing at their northern extremity only a few patches of birch, poplar, and alders; all the rest are marshy grounds, overgrown with rushes and coarse high grass, with some spots of oziers and alders; the resort of myriads of water fowl, swans, geese, an amazing variety of the duck kind, and I believe every species of snipe. The river Avatsha runs in several branches through this plain. Towards its northern extremity are an immense number of cold springs, that form several basins of water, with small runs, uniting in a rivulet, which has a course towards the south of two miles, and empties inself into the river generally known by the name of the Paratounca, but which is called by the natives Ilmitsh; and the original Paratounca is the run from the springs above mentioned, opposite to the discharge of which the village of that name is situated. These springs do not [301] freeze in winter, during which season they are frequented by swans, geese, and several species of duck, particularly the safka, or duck with a melodious note, which has induced me to stile it musical. Here they find an abundance of food, and the pulpy root of an aquatic plant which, in its appearance, exactly resembles the olive, but is like the chesnut in flavour: I used it as a vegetable, and thought it better than any production of the gardens; the natives call it the sarana of the geese."

27: Sauer--301-302 T-2 (1789-93) 1802 Kamchadal
116, 133, 484

"With regard to rivers, the Kamtshatka is the only one of any consequence. Its source I have already described: it flows nearly north to Neizshni Kamtshatka, where it turns to the east south-east about 25 miles, and empties itself into a large but shallow bay formed by the Kronotskoi and Kamtshatskoi promontories; its discharge is extremely shallow, not exceeding eight feet at high water, and the breakers are very violent with an easterly breeze. This, however, is the only navigable river on the peninsula.

The Bolshoia Reka has only a course of 20 miles. It is formed by the union of the Bystrea with the Natsheke, a little below Bolshoiretsk: the former has its rise from the springs near the source of the Kamtshatka, and takes a sweep from south to west; the latter commences a little south of the village Natsheke, and flows nearly west about 100 versts: neither are navigable, though, during the springflood, the natives sometimes venture down them in their canoes, but with great difficulty, owing to rapids, &c.

The Avatsha has also an interrupted and unnavigable course of 70 versts in a direction east south-east. The inhabitants of the [302] village Koriatsk, 20 miles up this river from its discharge, pass up and down it in their canoes, hauling them over the flats."

27: Sauer--302 T-2 (1789-93) 1802 Kamchadal
116, 133, 224, 484

"The Ilmitsh, commonly called the Paratounca, has its rise from near the Viluitshiskoi Sopka (called in Cook's last voyage the Paratounca); and from a lake near the Tareinskoi harbour, it makes a circuit of 85 versts, and discharges itself into the bay of Avatsha, only three miles in a direct line from its source: it is navigable for boats all the way; but I was fourteen hours in traversing the whole of this river, from the lake, in a canoe. The villagers of Paratounca go on the chase of deer, argali, bears, &c. about the source of this river, by passing down the stream into Tareinski harbour, and hauling their canoes over the plain already mentioned into the lake. An immense number of rivulets from the mountains flow to the east into the ocean, but none of them are either remarkable, or have their banks inhabited."

27: Sauer--302 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 777, 825

"Here are no lakes of any extent: the names of the principal ones are, Osernoi, about 40 miles from Cape Lopatka; Kronotskoi, 20 miles south-east of Tolbatshinski volcano; and another of less extent, situated about 40 miles north of Neizshni Kamtshatka, called Nerpitshi: the natives say that they are replete with fish; and tradition relates, that the fish of these lakes had two heads, or that they possessed legs; and, being sacred to some deity or demon, those who presumed to ensnare them were punished with misfortunes: some of the natives, however, seem to doubt the truth of this, while others still firmly believe it."

27: Sauer--303-304 T-2 (1789-93] 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

27: Sauer--304 T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"Toward the source of the Bystria, near the village Malka, are hot springs, a little way up the ascent of one of the mountains, which boil out of the earth in two or three places about a foot wide. Similar springs are seen near the village Natsheke, but more extensive, and forming in their run several convenient bathing-places. These have a sulphureous smell; and the stones taken from the bottom of the openings, where the springs appear, are covered with a shining thin coat, which resembles silver at first, but gets dull and of a dark colour after it has been sometime exposed to the air: the surrounding earth, to the distance of 20 fathoms in every direction, is warm, replete with empty shells like those of snails, and a transparent glutinous substance; as also with spots of loam, whereon any thing heavy being thrown sinks immediately. South of these springs, about the distance of 30 versts, at the source of the river Natsheke, is a sandy level spot, with several hot springs, the water of which is said to be brackish."

27: Sauer--304-305 T-2 (1789-93) 1802 Kamchadal
116, 133, 757

"At the distance of 12 versts from the village of Paratounca, in a direction north-west, is the discharge of a deep rivulet of warm water, called Klutshevoia, navigable for canoes three versts up-[305]wards. It springs from several hot water lakes in an extensive plain; one of which lakes is about 100 fathoms long, and 7 fathoms wide; very convenient for bathing near the shore, but the middle very deep, and extremely hot. About 20 fathoms from this is another, about 5 fathoms by 7, but excessively hot: a body of boiling water issues through a square hole in a stone at the eastern extremity; and it has a run into a cold water spring, so narrow, that you may stand with one foot in each. Ulcers, old and fresh wounds, are reputed to heal from bathing in this water. I used it for tea, but the flavour was not very agreeable, being something like that of alum. The hot springs of Shumatshik are situated 90 versts north of the bay of Avatsha, and flow into Kronotskoi Bay. There are several others, but of no note."

27: Sauer--305-306 T-2 (1789-93) 1802 Kamchadal-2
116, 133

this time earthquakes were felt two or three times in the course of every 24 hours.--Shevelutsh is 80 versts north of Klutshefskoi: this burnt formerly; but now it seldom happens that smoke issues from it: this volcano is the source of two rivulets, the Iltshutsh and Bakus, both of which flow into the Kamtshatka."

27: Sauer--305-306 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133

"The following are the principal volcanoes:

Opalsk: I have described this mountain as seen from the sea. Its situation is near the hot springs; but its emission of columns of smoke is of very recent date, and they are not constant; nor has it ever been observed to blaze. --Viluitsh, or Viluitshiskoi Sopka: this seems now completely extinguished:--Avatsha, 25 miles north of the bay, constantly sends forth a body of smoke from its summit; as does also Tylbatsh, and Klutshefskoi, or Kamtshatskoi Sopka, both situated near the river. Tylbatsh (frequently written Tolbalshinsk) is one of the mountains that constitute the eastern chain; but projects considerably towards the river. It is more lofty than the rest, and has a pointed top. A little way down it, a sharp ridge stretches away to the north; from this ridge, and the side of the mountain where it joins, the smoke issues. I have observed, in a clear night, a reflection over it, resembling the Aurora Borealis. Klutshefskoi volcano may be reckoned among [306] the highest peaks, I believe, in the world. It is situated 175 miles west of Bering's island, from which, however, it is distinctly seen in clear weather at the time of the sun's setting: at least, I am assured of this by several Kamtshadals who have been on the island. This volcano is frequently subject to eruptions: in 1789, on the 20th November, a great noise preceded an earthquake; flames burst forth, with discharges of small stones and ashes: the trembling of the earth and the noise continued, more or less, till the 23rd, when it abated considerably; but on the 15th February 1790, it again resumed its former violence until the 21st: all

28: Sarytschew--60-61 T-1 (1789-90) 1806 Kamchadal-1-2
116, 133

"The entrance of the bay [CMC: Avacha Bay] by the light-house, has 13 fathoms water, and a sandy bottom. The banks on both sides are peaked and stony, having occasionally windings, in and out. Not far beyond the light-house, stand three lofty isolated rocks in the form of pillars, close by each other; on which account they are denominated the Three Ribbons. Very near these pillars is a little creek called the Saline, from the salt-works which exist on its banks. On one side of the creek, lies a little stony island, called the Traitor's Island, from its having been the place of concealment for the ring-leaders of the Kamtschadale insurrection against the Russians. On the other side is a lofty rock, called the Grandmother's Rock.

The entrance into the bay extends two leagues beyond these, and terminates with the commencement of the bay itself, which is 26 leagues in extent, and loses itself in three creeks, running parallel with each other: one of which is called Tarjinskoi, the second Rakowoi, and the third forms the harbour of Petropaulowsk, which was the object of our destination. It lies more to the north of the entrance, in the middle of which is a sand-bank, where the depth of the water is scarcely 1 1/2 fathom. The creek itself is from six to fifteen fathoms deep, and affords a good anchorage every where in its muddy bottom. The shore and surrounding country are mountainous, except towards the north-west, where there are some plains and low-lands. From this side also, flow the rivers Awatska and Paratunka, into the creek.

Towards evening we came to anchor near the harbour of Petropaulowsk, which is above

the verst in circumference. On the [61] west side, it is sheltered by a mountainous narrow peninsula, and on the south side, by a small gut of land, consisting of pebbles, and called Koschka. Between that peninsula, and Koschka, one must run into the harbour. The breadth of this straight is 40, and the depth, from seven to nine fathoms. The bottom is muddy."

28: Sarytschew--61 T-1 (1789-90) 1806 Kamchadal
116, 133, 161, 361

"On the Koschka [CMC: a jutty of land at the entrance to Petropavlovsk harbor; see category 133, this source, pages 60-61] there are eight dwelling-houses, interspersed with several buloganen; or log-houses, and on the north shore of the haven are four, together with a wooden building for an hospital, and the store-houses built during the expedition of Commodore Behring, which are still in good condition. The number of the inhabitants is limited to eleven Kamtschadales, one ensign from the army, and 23 Kosaks. The country around the haven is mountainous, but the north and east sides have sufficient level ground for 300 houses."

28: Sarytschew--68-69 T-1 (1789-90) 1806 Kamchadal
116, 133

"On the 25th of February [CMC: 1790, while at Petropavlovsk], we observed an evident agitation of the earth, which is very frequent and strong, owing to its [69] proximity with the volcanic mountain of Awatska; but this was the first of the kind during our stay here. This mountain was likewise perfectly quiet, and emitted nothing but smoke; while the Klutschewish summit, on the other hand, sent forth, in January, flames, stones, lava, and a quantity of black sand, with which the whole circumjacent country was covered."

28: Sarytschew--69 T-1 (1789-90) 1806 Kamchadal
116, 133

"I sailed about for the purpose of surveying the bay of Awatska, and the two side bays. Rakowoi is three leagues long, and half a league broad; its depth is from 6 to 13 fathoms, and its bottom is muddy. The other, Targinskoi, situated on the north-west side of the Awatska bay, is five miles in length, and half a mile in breadth. Its north-east bank consists of a narrow mountainous promontory, which separates it from the Awatska bay. It has 13 fathom of water in the middle, which diminishes as you proceed downwards. Its bottom is likewise muddy.

The two rivers, Awatska and Paratunka, flow into the northern part of Awatskish bay, after running down the mountains through several low lands. From the mouth of these rivers upwards, there is a dry place half a mile broad; but elsewhere, the whole bay is tolerably deep, and would admit of large vessels to lie at anchor in 14 fathoms water. The bottom in the deepest places is muddy, but in the shallower parts is sandy."

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000 those I had, and then proceeded upon my journey, reaching by midnight Kickchick, twenty miles, a place of equal wretchedness with the last, and like it containing but fourteen or fifteen inhabitants, most of whom are disabled from work by disease. With the same dogs I reached Kolofsky ostrog thirty miles along the sea coast, upon which a tremendous surf was roaring with a strong northwest wind. There are in the neighbourhood several fine lakes which never freeze, and produce trout and salmon peal of a fine flavour during the whole of the winter. Deer, mountain sheep, and game of every description that is found in the Peninsula abound in the mountains and forests, and fine meadow lands every where skirt the coast.

133 I remained to take tea with the old Toion, whom
563 I found to be a fiddler and a scholar, and depart-
361 ed for Vorofskoy ostrog, forty miles. The mountains now approached nearer to the sea-coast, and present some beautiful scenery. I put up at the abode of a wealthy Russian farmer, and felt highly gratified
161 in observing a small but fat herd of cattle. This is
361 considered a rich spot, yet it contains only nine
133 dwellings with about forty inhabitants, not enough to keep up the chase. The place is prettily situated on the Vorofskaya river, about four miles from the sea. There is a snug harbour at the mouth of the river, where the transports from Okotsk formerly visited, and the river is navigable to the village which retains the vestiges of a small fortress. The meadow lands about it are at once

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133 extensive and luxuriant. The inhabitants provided
361 me with frozen fish, a delicacy I had so much en-
161 joyed on the Kolyma, with ducks and rein-deer meat, as also with dogs to resume the journey, which carried me to Kolpakofskoi ostrog, thirty miles, along a dreary sea beach. The village contains six dwellings and twenty people, who furnished me with dogs to Kroutogorova thirty miles further, a beautiful situation near the extremity of the almost level plane reaching from hence to Bolcheretzk. The famous Sopka, i. e. burning mountain, near Tchinsk, here becomes visible, and although the country is so rich, not a head of cattle is to be met with from Vorofskaya.

To Tchinsk are thirty miles of superior country, yet so deep in snow that we were obliged to take it by turns to go a head with snow shoes, at other times the government of a narte was thrown upon me, which I at first made but a bungling hand of. Tchinsk has twelve dwellings, it is consequently a considerable place! there are also two priests, brothers, whom I found drinking a
576 decoction of dried herb instead of tea. I felt angry with the Toion who had let slip eight dogs intended for me, and declined entering his dwelling, the strongest mark of displeasure which can be shown to these simple people. The poor fellow felt the slight so severely as he saw me entering another yourte, that I could not help regretting the deter-
361 mination I had made. To Soposhna it is thirty-five miles, which I travelled in company with the

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reverend pedlers, for every body here is a merchant. I made them happy by a pound of tea, a few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

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At midnight I continued on for Kovranskoy ostrog, twenty-two miles. There is here a law obliging the Toions to have a path made within twenty-four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

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487 quently was obliged to go before upon his snow
R shoes; and such was his diligence from fear of re-
177 prehension, that he not only arrived before me, but
.48 arrived in five hours, a very short time to accomplish such a journey upon snow shoes. I found it the most miserable place I had seen for a long period, reminding me of Zashiversk in northern Siberia. The brows of the hills are covered with brush wood, with little other appearance of nature.
133 From hence to Uskolofskoy ostrog are thirty-five
161 miles, which I was obliged to do by walking and al-
361 ternately driving a narte, and cannot say which of the two is the most fatiguing. The diseases prevalent in the place prevented almost any assistance being rendered us. There are no cattle, yet fine meadow lands. Fish and game are abundant. At this place I met with another old shipmate in the person of the brandy contractor, who accompanied me to the next station, Napanas, a village with six dwellings and forty people. The road leading to it is considered dangerous, owing to a large toondra or swampy desert which must be crossed; the dis-
300 tance is forty miles. We passed the desert in a slight fall of snow, which had not been sufficient to obliterate the marks of the track, else we must have been compelled to halt whenever the snow overtook us. I did not arrive until two o'clock in the morning, having been previously hurled down a snowy declivity of one hundred feet in depth: at the bottom of which, I, guide, dogs and narte all lay huddled together; however vexed I felt inclined to

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer,
but its situation in winter is exposed and dreary. A
range of mountains from the NE to the SE defend
it in some degree from the coldest winds, yet it is
on the whole but a poor place. There are at pre-
sent twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word
comprehending Siberian fortresses, says, "It would
be dangerous to attempt storming them, for who-
ever wanted to mount the greatest and only bul-
wark, a wooden paling, would most probably come
to the ground with the whole structure about him."
Such I am certain is the present state of Tygil,
and which, with its half dozen Cossacks, can only
be held *in terrorem* over the neighbouring Koriaks:
the Kamtchatdales are not a people numerically or
physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hos-
pital erected; when they are to be covered in I
know not, though shortly I hope, for they are
much wanted. The ravages of a certain disease
at this place are indeed dreadful, and I should
think ought to call forth the attention of the govern-

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563 tatoes, cabbages, turnips and radishes; but the two
137 former never arrive at complete maturity, the one being waxy, and the other without a head. The famous antiscorbutic cheremsha, or wild garlick, abounds, as does a small but delicious root, somewhat resembling a sweet potatoe, called, in the language of the country, kimtchiga. There is also an abundance of wild berries in the neighbourhood of Tygil, yet their chief support is fish and rein-deer, of both which I partook at the hospitable table of
000 the commander of the fortress. At the expiration of four days I departed, having remained so long to recover my feet, which had been severely frost-bitten from wet.

I was accompanied by the commander of the transport lying in the Haven: he was what is termed a good, though a droll, fellow; and I was
133 gratified with his society. Our route lay at first
361 up the Tygil, which from its source to near the town runs through an interesting country. At midnight we reached Sedanka, a small village, containing six dwellings. From thence to Bolcheretzk is called the Tygil coast, which, generally speaking, is low and flat, the sea-coast being from thirty to forty miles from the mountains. The villages through which I had come were all of them upon the banks of some small streams, which, in most cases, rise in the mountains; but sometimes they emanate from the lakes, which are numerous. The rivers I do not apprehend to be

29:Cochrane T-2 (1821-22)1824 Kamchadal

133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to
133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga;* we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 and his dogs: nothing can exceed the devastation,
133 or be compared to it, but the effects of the wind on sandy deserts or mountains. I have known instances of people detained for twenty and thirty days in this tremendous pass, and it is seldom that it is crossed without a gale. And yet all this difficulty and danger might be obviated simply by the erection of crosses or mounts, as in the northern parts of Siberia, where I have seen in the distance of thirty or forty miles, a small mound of earth, with a white and black chequered cross placed at every one hundred and fifty yards.

133 The night was exceedingly cold, and the snow
137 and wind prevented our even enjoying the luxury of a cup of tea, for no fire could be lighted. Crossing a second toundra, desert, of seven miles wide, with infinite labour to the dogs as well as ourselves, we entered upon a most magnificent country. Lofty, straight, and stout firs lined the right of the valley, while the dwarfish larch, and alder, mixed with birch, stood upon the left in all their bandied and
000 crooked shapes. The contrast was extremely pleasing as we glided along the milky valleys at a rapid rate. Immediately upon clearing the desert the snow and wind ceased, and we hailed the return of fine cold weather. Not long after we overtook a caravan of nartes in great distress, having been detained ten days in the mountains by the weather. The dogs had been without food for three days, and were evidently in the last stage. In the early

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 part of the evening we reached the Yelofka river, which unites not far hence with the Kamtchatka, running in a picturesque manner through the coun-
361 try. At seven we reached the ostrog of Yelofka,
161 fortunate in having crossed the mountains so safely.
133 Yelofka is a pleasant village of eight dwellings and forty-six people, the country round it is elevated and well wooded. We remained only a few hours to refresh ourselves, and then continued the journey along the river of its own name, the banks of which afford some beautiful scenery for about fifteen miles. We then came to a desert which we crossed in a purga, fortunately not very heavy. At forty miles we reached the village of Khartchina of
000 five dwellings and thirty inhabitants. I was welcomed to it by a respectable looking old man, a priest, son to the highly eulogized priest of Paratounka. The son perfectly well remembered Captains Cook and Clerk; he having been at that time a young man, living with his father at the village of Paratounka. Several uninteresting anecdotes were related of them, as also of Perouse, in their rambles of shooting or chasing the wild animals. I had at Yakutsk been recalled to the remembrance of Captain Cook by a silver watch, which now belongs to Captain Minitsky, of the Russian navy, and which, I think, is spoken of somewhere as having been given away by that great navigator to some individual merchant. He probably disposed of it, and thus at last it has fallen into the hands of the pre-

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 sent holder, who, though I feel assured he appreciates it highly, yet would not retain it, should relations, or others more nearly concerned, express a desire to be possessed of so valuable a memorial.

133 From Kharchina the route lies over a large lake,
137 and thence over a fine open country, abounding
361 with some of the finest fir-trees I have ever seen, reaching to the height of sixty and eighty feet. At twenty miles we reached the ostrog of Kamennoy, on the right bank of the Kamtchatka, and, changing dogs, proceeded twelve miles farther to Kama-
136 kie over numerous lakes near the river. The coun-
361 try here abounds with red foxes, and is certainly one of the most picturesque parts of the Peninsula: the beautiful view of the Sopka, or Peak of Cliuchie, was hid in the clouds. I movedon to wards Nishney Kamtchatsk, also an antient capital in the Peninsula, a far more eligible place than the pre-
000 sent site. The weather had now become very mild, no less than 3° of heat of Reaumur. We made good about seven miles of our journey through very deep snow by the ensuing morning. For three hours we did not move forward more than one mile, a heavy fall of snow had taken place, and it was found impossible to proceed, owing to the extraordinary heat of the weather. No track nor scent offered to the dogs, otherwise I would have persisted in the prosecution of my journey. The drivers, however, with snow shoes actually sunk eighteen inches deep in the snow, and I was therefore com-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

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133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
. 65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.

563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

29:Cochrane T-2 (1821-22)1824 Kamchadal

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574 I continued on for Pouschin, twenty miles, and
576 arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of
scrofula is become hereditary. In this part of the
peninsula the chase is scarce, and the inhabitants
mostly subsist upon fish, a few mountain sheep, and
wild rein-deer, being the only meat they taste from
one end of the year to the other. The situation is
fine and highly productive in fish, but at this mo-
ment there are not a sufficiency of people to trans-
act the ordinary business; a circumstance which
calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous coun-
try, which is more than compensated by the suc-
ceeding richness of a valley eighteen miles in
length. I crossed several times the Bistra, a
rapid stream, uniting with the Bolshaya Reka, and
was again obliged to become pilot, chief, and dog-
master; however, I managed very well, and ar-
rived early. Malka is deserving of little notice,
yet is said to be celebrated for its baths! The
situation is magnificently grand; the hospital
stands in the bosom of a lofty chain of elevated
mountains at two miles from the village. I was
welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2(1821-22)1824 Kamchadal

563 sides trade. Of late the Emperor has given the cler-
793 gy an allowance of flour as well as a regular salary,
R and it may therefore be hoped that the natives will,
177 at least, be so far benefited as to have fewer of their
.79 visits, except on their spiritual concerns.

Whether the Russian government will pay any
000 attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing re-
133 markable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also
132 emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

[in the winter of 1821-22--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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We now come to confider the rivers that fall into the Eaft Sea from the mouth of the *Awatfcha*, towards the fouth, to the *Kurilskaya Lopatka*; and from the *Kurilskaya Lopatka* into the *Penfchinska* fea to the *Tegbil* and the *Puftaia* rivers. 133

There are but few rivulets that interfect the country between the mouth of the *Awatfcha* and the *Lopatka*. The ridge of mountains, which divides *Kamtfchatka*, extends to the Eaft Sea: the declivity is fteep and craggy; and the gulphs and bays, which are formed by thefe mountains, afford a fafe harbour for veffels of any burthen in the worft weather.

The *Kurilfkaya Lopatka*, which by the natives is called *Kapoore*, is the fouthernmoft point of the cape of *Kamtfchatka*, and divides the eaftern from the *Penfchinska* fea: it takes its name from its refemblance to a man's fhoulder-blade. Mr. *Steller*, who has been upon the *Lopatka*, fays, that the place is not more than 10 fathoms above the furface of the fea, and for that reafon is fubject to great inundations, fo that for 20 verfts from thence no-body lives, except thofe who come there in the winter to catch foxes; and when the ice is carried thither with the beavers on it, then the *Kuriles*, who follow this ice along the fhore, affemble here in great multitudes. Within three verfts from the *Lopatka* nothing grows except mofs; and there are neither rivers nor fprings, only a few lakes and pools. The foil confifts of two layers, the lower is ftrong, and the upper fpongy; and its furface is full of hillocks, and ufelefs. The firft rivulet falling into the *Penfchinfka* fea, is called the *Utatumpit*; two verfts from the *Utatumpit*, the rivulet *Tapgutpan* runs into the fea, upon which ftands a fmall fort called *Kochinskoy*; and three verfts from thence is the *Pitpuy*, or *Ozernaya*, which runs out of a confiderable lake divided from the fea by a mountain. The *Ruffians* call this river *Kambala*, or Flounder River, becaufe great numbers of flounders are caught in the mouth of it. 103 133 134 137 133

 The

THE NATURAL HISTORY OF

KAMTSCHATKA.

PART II.

CHAP. I.

137

Of the SOIL.

UPON the banks of the river *Kamtſchatka* is found plenty of roots and berries, which in ſome meaſure ſupply the want of corn. There is alſo wood ſufficient not only for building houſes, but even for ſhip-building; and Mr. *Steller* is of opinion, that near the head of this river, both ſummer and winter corn would grow as well as in any other places in the ſame latitude, the ſoil being deep and rich; and though ſnow falls in very great quantities, yet it thaws early enough, and the ſpring is not ſo rainy, nor have they ſuch damps, there as in many other places. Several tryals of ſummer-corn have been actually made both in the upper and lower *Oſtrog* * of *Kamtſchatka*; in which both barley and oats have ſucceeded. At the monaſtery of our Lord of *Jakutſki*, they have

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* *Oſtrog* is a little town fortified with palliſades, where the *Ruſſian* Coſſacks, and other inhabitants live.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

184 241 ſeveral years paſt ſown ſeven or eight poods † of barley, which yielded a crop not only ſufficient for groats and meal for their own uſe, but even enough to ſupply their neighbours, though they are obliged to plough their land with men.

All garden ſtuff thrives not alike; the moſt ſucculent produce only leaves and ſtalks. Cabbage and lettice never grow to any head, and the peas continue in flower until late in the harveſt without yielding ſo much as pods; but garden roots which are full of juice, ſuch as turnips and radiſhes, grow very well. Theſe tryals, however, were only made upon the banks of the Great River and *Awatſcha*. Such things as require a hot ſoil, grow very well every where, but ſtill beſt upon the *Kamtſchatka*. Upon the Great River I never ſaw any turnips larger than three or four inches diameter; but upon the *Kamtſchatka*, I have ſeen them four or five times as big.

137 The graſs grows here ſo high, and is ſo full of ſap that one ſcarcely ſees any thing like it in all the empire of *Ruſſia*; near the river and lakes, and in the opening of the woods, it riſes to above the height of a man, and ſo faſt that it may ſometimes be mowed thrice in a ſummer; ſo that few places can be more proper for breeding of cattle; and although the blades are thick and high, and make but a coarſe ſort of hay, yet the cattle are large and fat, and give plenty of milk both ſummer and winter, which I attributed to the richneſs of the ſoil and the ſpring rains. The graſs continues full of juice, even to the beginning of winter, which being condenſed by the cold prevents the graſs from turning hard during that ſeaſon. As the graſs is ſo high and thick, a great deal of hay may be made upon a ſmall ſpot; and the cattle can find food in the fields all the winter. The places where 132 the graſs thus grows are never ſo much covered with ſnow as the bogs and ſwamps, and for this reaſon it is difficult to travel over them in the winter.

† A pood is a *Ruſſian* weight of 40 lb.

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In other places lying upon the Eastern Ocean, either to the N. or S. of *Kamtschatka*, there is no land fit for culture; for all that is near the shore is either sandy, stony, or boggy, and the banks are so narrow, that if the ground was good, yet there is not enough for agriculture; and there are but very little hopes of the land about the *Penschinska* sea answering better, especially for winter-corn, it being all marshy and boggy. At some distance from the sea are found woody places which are dry and high, and appear not improper for corn; but the snow which falls in the beginning of the harvest before the earth is frozen, and lies generally deep upon these places 'till the middle of *May*, both prevents the sowing of the summer-corn, and destroys the winter-corn; and, because at the thawing of the earth the corn would be blasted by the evening frosts, it is impossible to sow any before the middle of *June*; after which time to *August* are continual rains, so that sometimes the sun is not seen for fourteen days together: this would cause the corn to grow very high and full of juice; but, for want of warm and dry weather, it would never ripen. Notwithstanding, Mr. *Steller* thinks, that if the ground was properly prepared, oats and barley might ripen there; but this is much to be doubted, until, at least, further tryal can be made; for I have myself several times sown barley upon the Great River, and it grew well in thickness, height, and strength of blade 'till the beginning of *August*, when, just as the ear was putting forth, all of it was destroyed by the frost.

All these barren places, not only near the *Penschinska* sea, but even within the land, appear to be composed of earth brought from other parts. This one may discover by the different strata, and perceive how they have encreased yearly on the banks of the rivers, which are high, and on the cliffs that are bare. I have seen hanging out of the earth, trees which are not to be found in that country, more than seven feet deep under the surface. Hence it may be concluded, that all these barren, boggy places, where at

134 present are no woods, but only ſhrubs, and ſtunted ſallows, and birches, were formerly covered with water, which has decreaſed by degrees here, as it has upon the north-eaſtern coaſt. Below the earth lies a bed of pure ice, extremely hard; and under that a ſoft wateriſh clay, with gravel; this continues from the ſea up to the very mountains, and will ſufficiently account for the barrenneſs of theſe parts. But, though the land is not every where fit for agriculture, yet ſome places upon the river *Kamtſchatka* (which have been already mentioned) and along the *Biſtroy* river, are ſufficient to furniſh with corn, not only the inhabitants, but alſo the neighbouring parts. It is however to be feared, that the burning of the woods, in order to clear the lands, may drive away the ſables, who have a particular averſion to ſmoke: this happened upon the river *Lena*, formerly the beſt hunting country, but now deſerted by theſe animals.

137 The ſcarcity of wood is a great inconvenience, both the *Ruſſians*
313 and natives being obliged to fetch it twenty or thirty verſts with
489 great trouble and loſs of time, for the neceſſary uſes of boiling their ſalt and curing their fiſh: and it is very difficult to bring it down in floats, becauſe the current is rapid and ſo ſhallow, that they can bring only two little bundles on each ſide of a ſmall fiſhing-boat; otherwiſe they would obſtruct themſelves in the management of their boat, and thereby run the riſk of being driven upon the rocks, ſand-banks, and trunks of trees, where not only their boat and wood, but frequently the people themſelves are loſt. Sometimes the ſcarcity of wood is ſupplied by ſuch as is thrown up by the ſea, which the inhabitants gather upon the ſhore; but this wood that has been ſoaked in the water, although they are at great pains to dry it, never burns clear, but ſmothers away with a continual ſmoke very hurtful to the eyes.

137 At the diſtance of 30 or 40 verſts from the ſea, and near the
313 heads of the rivers, grow birch-trees, alder, and poplar; of which the people build their houſes and make their boats. But this

27: Sauer--290 T-2 (1789-93) 1802 Kamchadal
116, 133, 134, 135

"From this place [CMC: i.e., north of the village of Apoushinsk, from which point the Kamchatka River is navigable by small craft] the face of the country assumes the appearance of extreme fertility. The valley widens, and the space between the mountains east and west is at Virchni Kamtshatka 40 miles. The soil is deep and rich, composed of black earth, mixed with fine black ashes from the burning mountains, and fine iron sand, which adheres to a magnet, and forges well with bar-iron, but used alone is very brittle."

27: Sauer--292 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"As you approach the north [CMC: of the Kamchatka Peninsula], the severity of the climate increases; the soil becomes sandy and stoney; and the vegetable productions are stunted and weak. The isthmus is situated in latitude 59° 20', and the distance from sea to sea is here about 40 miles. The widest part is from Kronotskoi Noss to the river Itsha, about 220 miles."

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 134, 137, 782, 821

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

27: Sauer--304 T-2 (1789-93) 1802 Kamchadal
116, 133, 134

"Toward the source of the Bystria, near the village Malka, are hot springs, a little way up the ascent of one of the mountains, which boil out of the earth in two or three places about a foot wide. Similar springs are seen near the village Natsheke, but more extensive, and forming in their run several convenient bathing-places. These have a sulphureous smell; and the stones taken from the bottom of the openings, where the springs appear, are covered with a shining thin coat, which resembles silver at first, but gets dull and of a dark colour after it has been sometime exposed to the air: the surrounding earth, to the distance of 20 fathoms in every direction, is warm, replete with empty shells like those of snails, and a transparent glutinous substance; as also with spots of loam, whereon any thing heavy being thrown sinks immediately. South of these springs, about the distance of 30 versts, at the source of the river Natsheke, is a sandy level spot, with several hot springs, the water of which is said to be brackish."

29:Cochrane T-2(1821-22)1824 Kamchadal

000 extinct, and with them the very being of the Yakuti, who are even now going down in an equal ratio.

231 R 177 .23 Much benefit has been derived to the colony from the exertions of the present Chief, Captain Rikord. The rule of never allowing a cow to be killed until she is past calving, is in itself excellent, but the stock on hand is so small that a century would elapse before what can be termed herds of cattle could be seen wandering and feasting upon the almost unbounded pastures of the peninsula. What the different chiefs have been doing for the last fifty years, Heaven alone knows! When Captains King and Clarke were here, they seem to have taken it for granted, or to have been informed, that cattle of all descriptions were in a flourishing state. From the proximity of Okotsk to Tygil, a couple of transports might, in one summer, transport at least one thousand head of cattle, which, repeated for ten years, would place the peninsula in an absolutely enviable situation. This act of humanity would be attended with no expense to the government; the Kamtchatdales would willingly pay the value in sables, and the result would be, that no part of the vast Russian empire would be richer or better provided with food of various descriptions than the distant province of Kamtchatka.

134 241 R 177 .24 Upon the banks of the Kamtchatka, where the land lies distant from the salt water, and sheltered by the mountains from the east winds; as well as

29:Cochrane T-2 (1821-22)1824 Kamchadal

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on those banks which have been enriched by the lava emitted by the volcanoes, barley, oats, and rye have been produced, but in no instance with so much success as to pay the labour. The productions, it is true, have been a little more varied and a little riper, but rarely consumable. In spite of this fact, the gazettes of St. Petersburgh formally and officially announce this year that a quartern of rye produced nine quarterns, and that the size or weight of a common potatoe was three quarters of a pound. Three quarters of an ounce would be a sufficient tax upon credulity: I have no hesitation in saying that both these reports are fabulous in every sense of the word, for I have never seen a potatoe in the whole province either ripe, or larger than a hen's egg.

If large herds of cattle were distributed on the banks of the Kamtchatka, and other favoured places, with the benefit of manure, agricultural implements, and knowledge, no doubt the soil might be made to answer the purpose. I certainly cannot conceive the climate of Kamtchatka to be such, as of itself to preclude the pursuit of agriculture in some of its minor branches, as I consider the soil to be much superior to that of Connecticut, or Massachusetts, or either of our Canadas.

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In the vicinity of Avatcha are to be seen, what are by some termed artificial enclosures, within which cattle were formerly maintained, but I conclude them to be natural enclosures formed by the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

133 161 651 R 177 .65

The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed

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to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs.
[the Kurils--Analyst]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 hours' time. It was the white of an egg, with ſome camphire and ſugar, which he rubbed 'till it foamed upon a pewter plate, then tied it in a handkerchief, and bound it upon the forehead. This he found to ſucceed in every inflammation of the eyes.

132 It hails frequently both in ſummer and harveſt; but I never ſaw the hail bigger than peaſe. It ſeldom lightens but at the ſummer ſolſtice. The thunder is alſo but ſeldom heard, and then ſeems to be at a great diſtance. We have no inſtance of any one killed by thunder: the natives ſay, indeed, that before the arrival of the *Ruſſians* they had a great thunder, and ſome were killed by it; but this is to be queſtioned, ſince for ſo long a time we have had no inſtances of it. As to fogs, it is impoſſible that there ſhould be greater any where than at *Kamtſchatka*; and it is to be queſtioned whether deeper ſnows fall any where between 55 and 52 degrees north latitude than here, from the melting of which the rivers ſwell ſo much as to overflow their banks, and the earth in the ſpring is entirely covered with water. The cold in winter is moſt intenſe about the Great River and the *Awatſcha*; but in the lower *Kamtſchatkoi Oſtrog* it is much warmer than in any other place of *Siberia* in the ſame latitude.

The greateſt inconveniency ariſes from the violent winds and ſtorms, concerning which the following remarks may not be improper. Before a great wind, which generally comes from the eaſt, the air is always thick and dark; but, as I had not a thermometer, I cannot be certain if it is warmer then than at other times. The eaſt winds coming from the *Lopatka*, where are burning mountains and warm ſprings, I imagine that they not only ariſe from the narrowneſs of the land, but alſo from ſubterraneous fires and vapours.

135 With regard to other advantages or diſadvantages of this country,
258 one may ſay in general, that its greateſt riches conſiſt in plenty
439 of good furs and fiſh, and its greateſt inconveniences in the want of iron and ſalt. The firſt they are ſupplied with from other

other places, and the ſecond by boiling ſea water into ſalt; but the troubleſome diſtant carriage of the iron, and the boiling of the ſalt, are attended with ſuch expence and difficulty, that they are both ſold at a moſt intolerable price. One cannot buy a common ax under two rubles, and a pound of ſalt coſts four rubles.

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS.

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *.

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſhin, which contains 27 inches.

the place; but this natural phænomenon appeared ſo curious that 778
I returned to examine it. The people of *Shematchinſki* village 823
were obliged to declare the true reaſon why they had not formerly diſcovered them, and much againſt their will were forced to ſhew me the place, but would not go near it: and when they ſaw that we lay in the water, drank it, and eat things boiled with it, they expected to ſee us periſh immediately; but when they ſaw this did not happen, they told it in the village as an uncommon wonder, and were aſſured that we muſt be very extraordinary people ſince even the devils could not hurt us.

This is remarkable, that north from the mouth of the river 133
Kamtſchatka, and weſt along the coaſt of the river *Oſernoi*, there are no hot ſprings, although it abounds in *Pyrites*, ſulphur, iron ore, and ſtones that yield alum and vitriol. Mr. *Steller* obſerves, that the appearance of the country of *Kamtſchatka*, and the frequent earthquakes there, give reaſon to think that it is full of caverns replete with combuſtible matter, which taking fire in the bowels of the earth produces earthquakes, and makes thoſe vaſt alterations of which we ſee numerous inſtances in rocky ſhores being torn off both upon the *Beaver* ſea, and in the iſlands which lie between *Aſia* and *America*. The combuſtible matter, he tells us, is kindled by the ruſhing of the ſalt water into thoſe ſubterraneous caverns, through their apertures towards the ſea; which hypotheſis is ſtrengthened by his obſervation that the earthquakes are moſt frequent about the equinoxes, when the waves of the ſea are driven by the great ſtorms with uncommon violence upon the ſhores; and eſpecially about the ſpring equinox, at which time the water always riſes higher than at any other: and the inhabitants of *Kamtſchatka* 823
and the *Kuriles* know this ſo well, that they always fear the beginning of *March* and the end of *September*.

It is very extraordinary, that no iron has been diſcovered here, 135
although ſome ore is obſerved mixed with clay and earth, to which

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 which ſulphur being added the ſubterraneous fires may eaſily be
135 accounted for; nor do we yet know of any ſalt ſprings, although the narrowneſs of the iſthmus of the peninſula of *Kamtſchatka*, and ſo many ſubterraneous caverns under the rocky hills which have communication with the ſea, ſhould give us reaſon to conclude that there muſt be ſome.

After the hot ſprings we ought to take notice of the rivers which never freeze. Theſe are ſo common in *Kamtſchatka*, that there is ſcarcely one river which has not ſome very large openings, even in the moſt ſevere froſts; and the plains under the hills are ſo full of ſprings that one cannot go dry any where in the ſummer. Theſe ſprings, which joining make a little rivulet, and fall into the *Kleutchova Kamtſchatka*, never freeze, and yield fiſh almoſt the whole winter, which gives an advantage to the *Kleutchova*, as it furniſhes not only the *Kamtſchadales*, but all the people of the *Oſtrog* of *Niſhniſhantalſky*, with freſh fiſh, which is generally eſteemed, on account of its ſcarcity at that time, as a very great delicacy. This may alſo account for the wholeſomeneſs of all theſe waters, which the inhabitants drink after eating the fatteſt fiſh without the leaſt harm, although, in other places, cold water drunk upon fat fiſh produces the bloody flux.

CHAP.

CHAP. IV.

Of the METALS *and* MINERALS.

135

ALTHOUGH the peninſula of *Kamtſchatka* is hilly, and the ground ſuch as might naturally be ſuppoſed to produce metals and minerals, eſpecially iron and copper, with which *Siberia* abounds; yet hitherto little has been diſcovered. This is no proof that ſuch ores are not in *Kamtſchatka*; for, beſides that the *Kamtſchadales* are entirely unexperienced, the *Ruſſians* who live here have as yet given themſelves no trouble in the ſearch after metals; as they have ſuch large quantities of iron and copper inſtruments brought to them, that they have not only ſufficient for themſelves, but are alſo enabled to furniſh the *Kamtſchadales* and *Kuriles* with them at a very conſiderable profit. It is alſo to be conſidered, that the providing for their ſubſiſtance takes up ſo much of their time, that they can ſpare but little for any thing elſe; and moreover, the places proper for ſuch tryals are very difficult of acceſs: to which it may be added, that the frequent ſtorms and general inclemency of the weather are great hindrances to ſuch tryals; eſpecially when every neceſſary for the undertaking muſt be carried upon men's backs, for in the ſummer they can carry nothing upon dogs. It is reaſonable to preſume that ore might be found in *Kamtſchatka*, if it was worth while to ſearch for it. Copper ore has been found about the *Kurilſkoy* lake, and the *Ivovoy* bay; and a ſandy iron ore upon the banks of the ſeveral lakes and rivers; whence it is expected that there is iron ore in the hills from which theſe lakes and rivers riſe. Native ſulphur is gathered about the rivers *Kambalinſkoy* and *Oſernoi*, and the *Kronotzkoy* cape. The ſulphur

316 439 135 316 135

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

135 phur which they bring from *Olontoſki*, where it drops from the rocks, is quite fine and pellucid; and in the *Pyrites* upon the coaſt it is to be found every where.

The following kinds of earth are common. Great quantities of white chalk are found about the *Kurilſky* lake; tripoly and oker about the Great River, and the villages of *Nachikin* and *Koutchinubiff*; and a purple-coloured earth about the hot ſprings, 135 and ſometimes a hard ſtony oker. Among the ſtones in the 324 mountains are found, but rarely, ſmall cherry-coloured chryſtals; and near the river *Charious* are found pieces of fluſſe, which is like a coarſe green glaſs, of which the inhabitants formerly made knives, axes, lancets, and darts. It is called by the *Ruſſian* natives glaſs, and by the *Kamtſchadales*, *nanagy*. This fluſſe is alſo found in the copper mines about *Ecatherinenbourg*, where it is called a topaz. There is likewiſe here a ſort of light ſtone, white like chalk, of which the inhabitants make plates, and lamps wherein they burn their fiſh oil; and every where upon the ſhore is found an iron-coloured hard ſtone, porous as a ſpunge, and eaſily turned by the fire.

The inhabitants find pellucid ſtones near the ſprings of the river, which they uſe inſtead of flints. Some of theſe ſtones are ſemi-pellucid, whitiſh and milky, and reckoned cornelians by the *Ruſſians*. Some ſmall pellucid ſtones of a yellowiſh colour, like corals, are found upon the banks of ſeveral rivers; and plenty of hyacinths near *Tomſkoy*.

135 Hitherto they have diſcovered no precious ſtones here. The hills 278 are firmer than thoſe in *Siberia*, and do not fall away like them; but when the earth falls off they find much *lac lunæ*; and a ſoft kind of bolus, of a fattiſh creamy taſte, is found near the *Penſchinſka* ſea, *Kurilſkoy* lake, and the *Olutorſkoy*: this is uſed as an excellent remedy in fluxes. I ſent ſpecimens of 135 moſt of the above things to the Muſeum of the Imperial Academy of *St. Peterſbourg*. I muſt not forget to mention that

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and ſorts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

000 we paddled out into the current, and in another ten minutes the village was lost to view.

114 In Findlay's "North Pacific Directory" it is stated, though upon
135 what authority is not clear, that the Kamschatka River "is said to
136 be capable of admitting vessels of 100 tons about one hundred and fifty miles up the stream." This, however, is not correct, or at any rate is very misleading, for the river is beset throughout with sand-banks which in many places apparently lie completely across the stream. Thus, opposite Kluchi village there was only an average of seven feet of water, while both above and below we got depths of twenty or thirty feet and more. The sand-banks also are very unexpectedly placed, and the navigation of the stream by a large vessel, even if possible, could only be accomplished by the aid of an elaborate system of buoys, which, I need hardly say, is not likely to be instituted for many a year to come. From some versts above Kluchi to the mouth of the river, except at the Tchoaki or narrows, to which I shall have occasion to refer presently, many islands are formed by the bifurcation of the stream, some of them of large size, and the river increases considerably in breadth. Opposite the village it is said never to freeze entirely over, a fact the people attribute to the existence of hot springs in the river bed. They also told us that salmon remain here throughout the winter, though not in any great numbers.

Among these islands there appeared to be more duck than we had been lately accustomed to see in the lower part of the river, and we here obtained the Shoveller (*S. clypeata*) for the first time. Landing to replenish the larder at some small lakes towards the hour of sunset, we remarked both snipe and wild geese, neither of which we had previously met with, but it was too dark to dis-
000 tinguish the species. Verglaski followed us on occasions such as these with the stolid expression and steady gait he always affected. Nothing short of a bear, I believe, ever roused him to any less dignified pace than a walk, and as he slowly followed us, I had a lurking suspicion that he regarded our occupation as a rather

27: Sauer--290 T-2 (1789-93) 1802 Kamchadal
116, 133, 134, 135

"From this place [CMC: i.e., north of the village of Apoushinsk, from which point the Kamchatka River is navigable by small craft] the face of the country assumes the appearance of extreme fertility. The valley widens, and the space between the mountains east and west is at Virchni Kamtshatka 40 miles. The soil is deep and rich, composed of black earth, mixed with fine black ashes from the burning mountains, and fine iron sand, which adheres to a magnet, and forges well with bar-iron, but used alone is very brittle."

28: Sarytschew--62 T-1 (1789-90) 1806 Kamchadal
116, 135, 136

"By some beds of rock in this peninsula [CMC: at the entrance to Petropavlovsk harbor], we discovered green jasper marl, on which were the representations of shrubs or trees; we also found, in the crevices of the rocks, some layers of amaranth, not very large, and remarkably thin.

For some time after our arrival, there was no fresh fish to be had. In the beginning of November, we began to catch wachnas in abundance, and occasionally herrings. The wachna, (Gadus æglesinus), is a sort of stock-fish, about half a yard in length, with a roundish body, and three dorsal fins. When taken out of the water, it is perfectly of a copper colour, but soon turns quite pale. Its flesh is white, but soft, and not pleasant to the taste. The roe is, however, of a fine texture, and has the best flavour. It is an inhabitant of the European Ocean, but most frequently found in Kamtschatka."

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact
131 number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*,
136 and extends in length from the north-eaſt to the ſouth-weſt
161 50 verſts, and in breadth about 30. This iſland is full of
651 mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

132 that a man cannot ſtand upon his feet. Theſe winds, which
136 generally rage the three laſt-mentioned months, bring a great quantity of ice upon the ſhore of the *Lopatka* and *Awachinſkaya* bay, with a multitude of ſea-beavers: about this time, therefore,
132 is their beſt ſeaſon for catching theſe animals. The north winds, either in ſummer or winter, bring agreeable clear weather; but the ſouth and ſouth-weſt winds in ſummer are attended with rain, and in winter with ſnow. And although the cold is not ſo great, yet the air is always heavy and thick, and at ſea generally attended with great fogs, as our people, who went upon the *American* and *Japan* expedition, experienced: therefore ſailing in ſuch weather is as dangerous as living upon the land is diſagreeable; and this agreement of the weather of *Kamtſchatka* with what is found far out at ſea is to be attributed not only to neighbouring countries, but likewiſe to the great and extenſive Southern Ocean. Hence the northern parts of *Kamtſchatka*, that are ſheltered from the ſouth wind, are both more fertile and enjoy a better climate; and the nearer one comes to the *Lopatka* the moiſter and thicker is the air in ſummer, and the winds more violent and of longer duration in winter. It frequently happens, that about the Great River the weather is very calm and agreeable, while at the *Lopatka* the inhabitants cannot ſtir out of their huts; becauſe it is a narrow point of land, and expoſed to every wind, except in the bay. All along the *Penſchinſka* ſea, the more northernly any place lies, the leſs rain have they in ſummer and wind in winter. The winds and weather about the mouth of the *Kamtſchatka* river, and near to the upper *Oſtrog*, are very changeable. From the eaſt and ſouth-eaſt they have as violent ſtorms as about the *Penſchinſka* ſea; but yet, compared with this, the weather is more frequently fair than rainy. The difference between the eaſtern and weſtern parts of *Kamtſchatka* is plainly to be ſeen in travelling from the head of the *Biſtroy* river: for towards the *Penſchinſka* ſea the air appears always thick and hazy,

however the agitation of the waters was leſs than what had been formerly obſerved. The earthquakes are ſaid to be more violent near a mountain that burns, than near one that has left off burning, or is not quite kindled. 133

Beſides theſe mountains, I heard of two other gulphs where ſmoke ariſes: one is called *Joupanoſky*; the other, *Shevelitche*; but there are ſeveral places farther north than the river *Kamtſchatka*: ſome of which emit ſmoke, and ſome fire: and there are in the *Kurilſki* iſlands, one upon the *Paromuſir*, and another upon the *Alaide*; concerning which Mr. *Steller* obſerves, that it is only one hill which burns, not a whole ridge; all theſe mountains have outwardly the ſame appearance, and it is, therefore, probable that their contents are much the ſame; that from the external appearance, one may judge of their internal contents, and of their aptneſs to take fire and burn; and that in all theſe which have ſmoked or burned formerly, but have been extinguiſhed, lakes are always found; whence he concludes, that as theſe were burnt down to the bottom, the waters ruſhing through the opened paſſages, filled the empty ſpace; and hence an account may alſo be given of the cauſe of the hot ſprings.

There are two hills which have left off burning; the *Apalſky*, out of which riſes the river *Apala*; and the *Biloutchinſky*, from which comes the river *Biloutchik*. At the bottom of this hill is a lake, where vaſt numbers of herrings are caught in the months of *March*, *April*, and *May*. 136

CHAP.

CHAP. VI.

Of the LAND ANIMALS.

THE principal riches of *Kamtſchatka* conſiſt in the great number of wild beaſts: among which are foxes, ſables, ſtone foxes, hares, marmottas, ermins, weaſels, wolves, rein-deer wild and tame, and ſtone rams. Their fox ſkins in the thickneſs, length, and beauty of their hair equal, if not excel, all the foxes of *Siberia*; beſides there are in *Kamtſchatka* almoſt all the different ſpecies of foxes which are to be found in other places, ſuch as the red, fiery, blue-breaſted, or marked with a black croſs, the cheſnut, black cheſnut, and the like; and ſometimes white foxes are found there, but theſe very ſeldom. It is remarkable, that the more valuable foxes are the moſt cunning; ſuch are the black cheſnut, the blue-breaſted, and the fiery coloured; ſo that not only the *Kamtſchadales*, but even the *Ruſſians* find it difficult to catch them. It happened while I was at *Kamtſchatka*, that the Coſſacks tried for two winters to catch one black fox which frequented the Great River, without being able to effect it. The moſt uſual method of taking them is either by poiſon, traps, or bows. The poiſon is thrown in lumps in the freſh tracts; the traps are ſet upon the ſides of hills, baited with a live animal; and for the greater ſecurity two or three of the traps are placed upon one hillock, that whatever way the foxes approach they may fall into one of them; and this is found neceſſary, for thoſe, which have been once in danger from the ſtroke of this trap, proceed afterwards ſo cautiouſly, that they eat the bait without being ſeiſed; but, with all their cunning, it is difficult for them to eſcape the

136 224 177

ſeveral

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 177 ſeveral traps, which ſeize them ſometimes by the head, and ſometimes by the foot. The method of killing them with the bow is thus: the hunters muſt know exactly how high to place it; when the bow is bent, it is faſtened to a ſtake driven into the earth near which the fox's tract is obſerved, and then a cord drawn from the bow-ſtring, is ſtretched very tight over his ordinary path; and ſo ſoon as this cord is touched with the foot of the fox, the bow is diſcharged, and the arrow pierces the very heart. Theſe are the inventions of the *Ruſſian* Coſſacks; for formerly the *Kamtſchadales* gave themſelves no trouble about the foxes, not valuing their furrs much more than dogs' ſkins. They pretend they could have killed as many as they wanted with ſticks, and that foxes were formerly ſo numerous in *Kamtſchatka*, that when they fed their dogs, they were obliged to 136 224 drive them away from the trough: and though this may ſeem improbable, yet it is certain, that even now they are in great plenty near the forts, which at night they enter without any ſeeming apprehenſion of danger from the dogs of the country, which either cannot catch them, or, not being bred to it, do not mind them. It happened when I was there, that one of the inhabitants catched ſeveral of them in the pit where they keep their fiſh. The beſt time to hunt foxes is, when the earth is hard frozen, before the ſnow falls, as it is then difficult for them to dig out the rats' neſts, which they do when the earth is thawed, the rats 224 being their chief ſupport. The *Kuriles*, who live upon the 286 *Lopatka*, catch foxes in a manner peculiar to themſelves. They have a net made of the hair of whales' beards, compoſed of ſeveral rings; this is ſpread upon the ground, and to a ring in the middle they bind a magpye; round the net is drawn a cord, the ends of which are held by a perſon concealed in a pit near at hand, who, when the fox ſprings upon the bird, draws the cord and gathers together the net, which ſurrounds the fox as the drag net does a fiſh.

The

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
183 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

iſlands

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks 1his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. GMEL.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. LINN.

1 [Original torn. Probably "it worth."

1: Krasheninnikov N-5 (1736-48) 1764 Kamchadal

136 rity in killing of deer, which they practise in this manner:—They climb up some tree, carrying with them a parcel of such moss as the deer use to eat. This they let fall from the tree, and if the deer [1] eat it, they throw themselves down upon his back; then fastening themselves between the horns, they tear out his eyes, and give him so much pain, that the miserable animal, to put an end to his torment, or if possible to free himself from the cause of it by destroying his enemy, strikes his head against the trees, which generally kills him. No sooner is he brought down than the glutton divides his flesh carefully, and hides it in the earth, to save it from being seized by any other creature; and never eats a bellyful before he has done this. In the same manner, upon the river *Lena*, they destroy horses. They are easily tamed, and are capable of learning several tricks. It has been said, but we never heard it ascertained, that they carry their gluttony to such a degree as to be obliged to relieve themselves by squeezing their over-swoln bodies between two trees to unburthen their bellies of the insufferable load. Those that are tamed are not so voracious; but perhaps these animals are not alike in all countries.

Bears and wolves are so numerous here, that they fill the woods and fields like cattle; the bears in summer, and the
136 wolves in winter. The bears of *Kamtschatka* are neither large
752 nor fierce, and never fall upon people, unless they find them asleep; and then they seldom kill any one outright, but most commonly tear the scalp from the back part of the head; and, when fiercer than ordinary, tear off some of the fleshy parts, but never eat them. The people who have been thus wounded, are called *Dranki*, and are frequently to be met with. It is remarked here, that the bears never hurt women; but, in the summer, go about with them like tame animals, „especially

1. [Original torn. Probably "Comes to."

especially when they gather berries. Sometimes, indeed, the bears eat up the berries which the women have gathered, and this is the only injury they do them. 136 762

In the season, when the fish enter the mouths of the rivers in vast shoals, great numbers of bears come down from the hills, and settle in proper places for catching them; which they do in such plenty, that they only eat and suck the bones of the heads, neglecting the bodies; but when this plenty is past, they are glad to gnaw the bones which they formerly despised. They frequently steal fish from the fishing huts of the Cossacks, although there is always a woman left to watch them. To her indeed they never do any hurt, satisfying themselves with what fish they can find. 136

Before the introduction of fire-arms, they used several devices for killing the bears. Cutting several billets of wood, they stop up the mouth of the den with them, which the bear draws in that his passage may not be shut up. This they continue until he is so straitened in his den that he cannot turn himself; then they dig down from above, and kill him with their spears. The *Koreki*, in order to catch the bears, seek out some tree that is crooked above, upon which they fasten a snare, and behind it place some proper bait; which the bear endeavouring to seize is held fast by the head or the paw. They place heavy logs of wood, in such a manner, that they will fall with the least touch and crush them. Another method is to lay a board driven full of iron hooks in the bear's tract, and near to that they place something that easily falls down; this frightening the bear by its fall, he runs upon the board with greater force; and finding first one fore paw wounded and seized by the hooks, he endeavours to free himself by beating the board with the other; thus both being fixed, he rests on his hinder legs, which causes the board to rise before his 224

eyes,

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

136 wolves are very ſeldom ſeen here, and therefore they are much
262 more eſteemed than the grey. Although the *Kamtſchadales*
237 are called univerſal eaters, yet they never eat the fleſh of either wolves or foxes. The deer and ſtone rams may be reckoned among the moſt uſeful of all the animals in *Kamtſchatka*, becauſe their ſkins are moſt uſed in cloathing. The inhabitants, however, kill but few in proportion to the great numbers that are in
136 this country. The deer live in moſſy places, and the wild rams
224 upon the higheſt mountains; ſo that the hunters of the wild rams
237 leave their dwellings in the beginning of harveſt, and taking all their families with them go to the hills, where they are employed in this chaſe until the month of *December*. The wild rams reſemble goats, but their hair is like the deers'. They have two horns that are twiſted round like the *Ordinſky* rams, but much larger. The horns of thoſe that are of full age weigh each of them from 25 to 30 pounds. They run very ſwiftly, throwing their horns back upon their ſhoulders; ſpring over rocks, and run upon the narrow ledges of the moſt dangerous precipices. Cloaths made of their ſkins are very warm. The fat upon their haunches is equal to that of the deer, and the fleſh is a moſt delicious food. Of the horns they make ladles, ſpoons, and other ſmall utenſils; and the horn entire they carry upon the road at their girdles, and uſe it for a bottle.

136 There are three kinds of rats; the firſt of which is of a brown colour, as large as the greateſt houſe-rats in *Europe*: but their cry is very different, reſembling the ſqueaking of pigs; otherwiſe they are very like our common rats. Of the ſecond kind there are but few, and theſe in the houſes, where they run about without fear, and live upon any offals. The third ſort have a diſpoſition ſomewhat like the drones among bees, laying up no manner of proviſion, but ſtealing their food from the firſt kind, which live in the fields, woods, and high mountains, in great numbers.

numbers. The tegulchitch, or first kind, have nests very roomy, neat, and spread with grass, divided into different apartments; in some of which they lay up the saranne quite clean, in others rough; in others, again, several sorts of roots, which they gather in summer with great labour, and lay up against winter. In dry sunny days they drag these out of their nests, and dry them. During the summer they live upon berries, and what else they can find proper for their food; never touching their winter provision so long as they can find any food in the fields. Among the several things found in their nests, I observed the saranne, the anacampserus, bistort, goats-beard, burnet, and cedar nuts. 136

These rats change their habitations like the wandering tartars, and sometimes for a certain number of years they all leave *Kamtschatka*, and go to some other place. This retirement is very alarming to the *Kamtschadales*, who think it forebodes a rainy season and a bad year for the chace: but when these creatures return, they confidently expect a fine one and good hunting; so that, as soon as they begin to re-appear, expresses are sent to all parts to carry the good news. They always take their departure in the spring, first gathering together in vast numbers. They direct their course due west, crossing rivers, lakes, and even arms of the sea; and when, after long swimming, they reach the shore, they lie upon the banks, as if they were dead, 'till at length they recover their strength, and then set out again upon their march. Their greatest danger in the water is lest some ravenous fish should swallow them up: but upon the land they have nothing to fear; and the *Kamtschadales*, who are so greatly interested in their preservation, when they find them weak upon the banks of the rivers or lakes, they give them any assistance in their power. From the river *Pengin* they go southward, and about the middle of *July* they generally reach *Ochotska* and *Judoma*. Sometimes their troop is so numerous 136 825 787 136

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 merous that travellers muſt wait two hours before they paſs. They return commonly to *Kamtſchatka* about the month of *October*. It is ſurpriſing that ſuch ſmall animals, in one ſummer, can paſs over ſuch an immenſe tract of land; and one cannot but admire the order and regularity which they obſerve in their march, as well as the foreknowledge they have of the change of weather.

825 Some of the inhabitants aſſured me, that when they go out of their neſts they cover their proviſions with poiſonous herbs, to deſtroy other rats that may come to rob their ſtore; and that, if all their winter proviſion is taken away, and nothing left that they can eat, in the ſtead of their own ſtores, they ſtrangle themſelves for vexation, ſqueezing their necks between the forked branches of ſhrubs: for which reaſon the *Kamtſchadales* never take away all their ſtore, and even pay for what they take by putting in either dried caviar, or ſomething that will ſerve the poor creatures for ſuſtenance. Although all theſe circumſtances are related by the moſt ſerious of the *Kamtſchadales*, yet we muſt not implicitly rely on their authority, before the facts are better enquired into.

231 The dogs of *Kamtſchatka* are extreamly like the common village dogs, and are white, black, ſpotted white and black, or grey like the wolves; brown or other colours being very rare. They are eſteemed ſwifter and longer-lived than any other dogs; and this may be attributed to their light ſimple food, which is fiſh. In the ſpring, every one lets his dogs run at liberty, without taking any care about them; for they can be uſed for travelling only while the ſnow is on the ground. They then feed upon what they can get in the fields, where they dig for the mice; and in the rivers they, as well as the bears, catch fiſh. In the month of *October* the *Kamtſchadales* call them home, and tie them up near their huts, 'till they loſe a good deal of their fat, that they may be lighter for the road, and then one hears

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CHAP. VII.

Of the VITIMSKY SABLES, *and the Method of hunting them.* 000

ALTHOUGH the ſable-hunting of *Vitimſky* does not properly belong to the deſcription of *Kamtſchatka*, yet as in treating of the latter we have had occaſion to mention the ſable, I thought it might not be amiſs to give an account of the various methods of this chace in different places. The *Kamtſchadales* do not ſtir out for a fortnight or more after 224/777 a piece of ill-luck, or having hunted one day without game; but the *Vitimſky* hunters ſpend almoſt the whole year in continual toil, and are very happy, if, in that time, they catch ten ſables for each man in company. It is true indeed, that ten com- 000 mon *Vitimſky* ſables are equal to forty of *Kamtſchatka:* but, notwithſtanding, if the inhabitants of *Kamtſchatka* would take the ſame pains as thoſe of *Vitimſky*, they might exceed them in the profits of hunting; for ſables are as numerous in *Kamtſchatka* as ſquirrels are upon the river *Lena*. The *Vitimſky* hunting is the more remarkable for being ſubject to many rigorous laws and ſuperſtitious obſervations, which the hunters bind themſelves to obſerve.

Before *Siberia* was conquered by the *Ruſſians*, it abounded 136 with ſables; but, at preſent, wherever the *Ruſſians* are ſettled, none can be catched; for ſables retire at a diſtance from all inhabited places, and live in deſolate woods and mountains. The ſable hunters go up by the river *Vitime* and the two rivers 000 *Mama*, which fall into that river, as far as to the lake *Orenne*, which is upon the right hand, as high and higher than the great cataract, where the beſt hunting is. The fineſt ſables are caught upon

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

upon the little river *Kutomale*, which falls into the river *Vitima*, upon the right hand above the cataract and mouths of the lower *Mama* and the brook *Petrova*. Lower than these places the sables are considerably worse; and all the hunters agree that nearer the heads of the rivers the sables are better, and nearer the mouths still worse.

136 The sables live in holes, like other animals of their kind; such as martins, weasles, and ermines. The hunters also relate, that they build themselves nests upon the trees with rods and grass; that they sometimes lie in their nests and sometimes in their holes; that in summer as well as in winter they lie about twelve hours in their holes or nests, and in the other twelve they go about to seek their food. In the summer time, before the berries are ripe, they feed upon weasels, ermines, or squirrels, but chiefly upon hares; and in the winter upon birds. When the berries ripen, they eat cranberries and hurtleberries, but principally those of the service-tree, which causes them to itch and rub themselves against the trees, by which they wear off the hair from their sides. Hence it happens, when the service-berries are very plentiful, that the hunters lose their labour.

The sables bring forth their young in their holes or nests, about the end of *March* or the beginning of *April*; and have from three to five at a time, which they give suck to from four to six weeks.

They never hunt sables but in winter, for in the spring they cast their hair; which in the summer is very short, and even in the harvest does not come to perfection. Such sables are called *nedasobili*; that is, imperfect sables; and sell at a low price.

The sable-hunters, both *Russians* and natives, begin to set out for hunting about the end of *August*. Some *Russians* go themselves, and others hire people to hunt for them, giving them proper cloaths and instruments for hunting, and provisions for the time of their being out. When they return from the chace

how many ſables or other beaſts their party has killed, and if any of their parties have done any thing contrary to his orders and the common laws. Theſe crimes they puniſh differently: ſome they tie to a ſtake, others they oblige to aſk pardon of every one of the company; a thief they beat ſeverely, and allow him no ſhare of the booty; nay, they even take his own baggage from him, and divide it among themſelves. They remain in their head-quarters until the rivers are free of ice; and after the hunting they employ their time in preparing the ſkins. As ſoon as the ice is all gone off the rivers, they ſet out, in thoſe little boats which they came in, on their return home, where they give the ſables to the ſeveral churches to which they promiſed them; and then, having paid their tax-furs, they ſell the reſt, dividing equally the money, or goods, which they receive for them.

CHAP. VIII.

Of the SEA BEASTS.

UNDER the name of ſea beaſts are here underſtood ſuch animals as are called amphibious, which, although they live for the moſt part in the water, frequently come upon the dry land, and upon, or near it, bring forth their young. Water beaſts may be divided into three claſſes: 1ſt, Thoſe which live in freſh water lakes, and rivers, as the otter. 2d, Thoſe which live in freſh or ſalt water, ſuch as ſeals. 3d, Thoſe which are never found in freſh water, ſuch as ſea beavers, ſea cats, and others.

Although otters be very common in *Kamtſchatka*, yet the price is not low; a very indifferent ſkin will coſt a ruble. They

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225 commonly hunt them with dogs when the ſnow comes in drifts,
237 and they wander at too great a diſtance from the river. They uſe their ſkins to make borders round their garments, but principally to preſerve the ſable-ſkins, which are obſerved to be preſerved better, when wrapt in otter-ſkins than any other way.

136 It is incredible to think what a number of ſeals there are in the ſeas and lakes of that country, eſpecially when the fiſh come up the rivers, which they follow in droves, not only to the mouth, but even far up the ſtream. So numerous are they that all the iſlands or ſand-banks are quite covered with them, inſomuch that ſmall boats are in great danger near theſe places. When the ſeals obſerve any boat approaching they throw themſelves in great numbers into the water, which makes ſuch a motion in it as will overſet the canoes or ſmall boats, if they go at once into it. No animal has a more diſagreeable cry, and their noiſe is inceſſant.

There are reckoned to be four ſorts of this animal; the very largeſt of which is catched from 56° to 64° of north latitude. This ſort only differs from the others in its bulk, which exceeds that of a large ox. The ſecond ſpecies is about the ſize of a yearling bullock. Their ſkin is of different colours, ſomething like the ſkin of a tyger; having ſeveral ſpots of equal largeneſs on the back, with a white and yellowiſh belly. Their young ones are as white as ſnow. The third is yet leſs than the former. Its ſkin is yellowiſh, with large cherry-coloured circles, which take up near the half of its ſurface. The fourth kind is ſeen in the large lakes of *Baikaal* and *Oronne*. Its ſize is like thoſe that are found near *Archangel*; and their colour is whitiſh.

They are very vivacious: I ſaw one, that was taken by a hook in the mouth of the Great River, throw itſelf upon people with great fierceneſs, even after its ſkull was broken into pieces. I obſerved that he was no ſooner brought on ſhore than

than he began to try to run again into the river; and when he found that this was impoſſible, he began to weep; and when they beat and bruiſed him, it only made him more fierce and wild. 136

The ſeals never go farther from the ſhore than 30 leagues; and are moſt commonly to be found near the mouths of great rivers or bays: they will follow the fiſh 80 verſts up a river. They bring forth only one young one, which they nouriſh with two breaſts. The *Tunguſi* give the ſeals' milk to their children for a medicine. The old ſeals cry like one that ſtrains in vomiting, and the young like people groaning through pain. When the tide goes out they lie upon the dry rocks, and in play puſh one another into the water; but when they begin to be angry they bite one another very cruelly. They ſleep very ſound: but, being awakened by the approach of any one, they are in very great fear; and haſtening towards the ſea, to make the way ſmoother, as is ſuppoſed, they vomit out water.

There are different ways of killing them: In the rivers they ſhoot them with ſcrewed-barrelled guns; but they muſt be careful to hit the head, becauſe a hundred bullets will not do them the leaſt hurt in any other place, as they all lodge in the fat that covers their body. They ſearch for them upon ſhore, and ſurpriſing them in their ſleep kill them with clubs: or when they ſleep, laying their ſnout upon the ice, they drive a knife quite through the ſnout, which being faſtened to a long thong they drag the animal out. 225

The ſeals are not ſo dear as one would imagine the many uſes they put them to ſhould render them; for, beſides the uſe of their fat and fleſh, the ſkins of the larger ſort ſerve for ſoles of ſhoes. The *Koreki*, *Olutores*, and the *Tchukotſkoi*, alſo make boats or baidares with them of different ſizes, ſome even ſo large that they will carry thirty men. Theſe boats have this advantage over 237

thoſe

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825 were filled with gruel and the ſeals made of graſs, and gave one
796 to each fiſher. They then went all out of the hut, and cried
782 *Uenic*; a word they uſe in calling to one another when they go to kill the ſeals or other ſea animals. Then taking out the ſeals made of graſs they threw them into the fire, praying them to make them frequent viſits; after which, returning into the hut, they put out the fire, and eat the gruel that was in the bowls.

136 The ſea horſe is but ſeldom ſeen about *Kamtſchatka*, and then only in the moſt northernly places. The moſt are caught near the cape of *Tchukotſkoi*, being both larger and more numerous there than any where elſe. Their teeth are what we commonly call fiſh-bone, the price of which depends upon their largeneſs or weight: the deareſt are thoſe that are about twenty pounds; but theſe are ſeldom met with, or even ſuch as weigh ten or twelve pounds, the common weight being five or ſix pounds.

The ſea lion * and cat, in their uſual ſtructure, differ very little from the ſea horſe and ſea calf, and are therefore to be reckoned of the ſame kind.

Some call the ſea lions ſea horſes, becauſe they have manes. In their ſhape they are like the ſea calf; and their necks are bare, excepting a ſmall mane of hard curled hairs: the reſt of their body is covered with a cheſnut-coloured hair. They have a middle-ſized head, ſhort ears, a ſnout ſhort and drawn up like a pug dog's, great teeth, and webbed feet. They are found moſt frequently about rocky ſhores or rocks in the ſea, upon which they climb very high, in great numbers. They roar in a ſtrange, frightful manner, much louder than the ſea calf; and they are thus far of uſe to people at ſea, that in foggy weather, by their roaring, they warn them of rocks or iſlands being near, as few rocks or iſlands in this part of the world are without theſe animals.

* Leo marinus. STELLER.

Although

Although in appearance and ſize this animal ſeems to be very 136
dangerous, and marches with ſuch a fierce mien that he looks like a true lion, yet is he ſuch a coward, that at the ſight of a man he hurries into the water; and when he is ſurpriſed aſleep, and awakened either by a loud cry or blows with a club, he is in ſuch fear and confuſion, that in running away he falls down, all his joints quaking with terror; but, when he finds no poſſibility of eſcaping, he will then attack his enemy with the greateſt fierceneſs, ſhaking his head and roaring very terribly; and then the boldeſt muſt ſeek to ſave himſelf from his rage. For this 225
reaſon the *Kamtſchadales* ſeldom kill the ſea lions at ſea, unleſs when they can ſurpriſe them ſleeping there, but generally upon land; and when they find them aſleep on ſhore they approach them with great caution, going againſt the wind. But none dare undertake this game, but ſuch as can truſt to their ſtrength or their heels. Stealing upon them, they ſtrike a knife into their breaſt under their fore paw; the aſſiſtants in the mean time tying a cord made of ſea calf's ſkin, which is faſtened to the knife, about a ſtake. Then every one runs off as faſt as he can, and endeavours at a diſtance to wound him with arrows, or knives, which they dart at him; and at laſt, when his ſtrength is quite waſted, they diſpatch him with clubs.

When they find them aſleep at ſea, they ſhoot poiſoned arrows at them, and get off as faſt as poſſible. The wounded animal, unable to ſuffer the pain ariſing from the ſalt water in the poiſoned wound, runs himſelf aſhore, where they kill him outright with darts or arrows; or if the place is not ſafe for ſuch an attack, they wait until he dies of his firſt wound, which follows in 24 hours. This game is ſo honourable among the natives, 554
that the man who has killed moſt of theſe beaſts is eſteemed the 225
greateſt hero: for this reaſon many engage in this dangerous hunting, not only for the fleſh, which is looked upon as very delicate, but rather for the honour that attends it. Two or

225 three ſea lions are a great load for their boats; and, as it is
302 eſteemed diſhonourable to leave any game which they have caught, they ſometimes ſo overload their boats, that, though they are very expert in the management of them, they and their game go to the bottom together. In theſe veſſels they go to the deſert iſland *Alaide*, which lies out at ſea about thirty miles, and are ſometimes carried four, five, and even eight days without ſeeing any land, expoſed to the cold of theſe climates; and without any compaſs, they return to their habitations by obſerving the ſun or moon.

237 Of the ſkins of the ſea lion they make cords, ſhoe-ſoles, and
136 ſhoes. The female has two, three, and ſometimes four young ones. They couple in the months of *Auguſt* or *September*; and are pregnant about ten months, as they generally bring forth their young about the beginning of *July*. The male treats the female with great tenderneſs, not like the ſea cat, but by fondneſs endeavours to gain her affection. Both male and female ſeem to take very little care of their young, frequently ſtifling them under their paws as they ſuck; nor do they ſhew
136 any concern at ſeeing them killed before their eyes. The young are not lively nor full of play, like moſt other young animals, but are almoſt continually aſleep. Towards the evening the male and female ſwim out to ſea with their brood, but not far from the ſhore. The young climb upon the mother's back, and reſt themſelves; the male in the mean time playing about toſſes the lazy puppies into the water, to oblige them to learn to ſwim. Some of them have been thrown into the ſea, but inſtead of ſwimming away they haſten again to land. They are twice as large as the young of the ſea cat. Although theſe animals naturally run from a man, yet it has been obſerved that they are not always ſo wild; particularly when their young have ſcarcely learned to ſwim. Mr. *Steller* lived ſix days in a high place amongſt whole herds of them, and out of his hut ſaw

ſeveral

ſeveral of their actions. The animals lay around him, ſeeming to obſerve his fire and what he was employed about; and never ran away, although he even went amongſt them, and ſeized ſome of their young for his diſſections, but remained quite at their eaſe. They went about and quarrelled for their miſtreſs without being diſturbed by his preſence; and one male fought three days for a female, and was wounded in more than a hundred places. The ſea cats never take any part in their quarrels, but endeavour to get out of the way as far as they can, giving place to them; nay, they never hinder the puppies of the ſea lion from playing with them, taking all care not to hurt them in the leaſt: but the ſea cats ſhun the company of the ſea lions as much as poſſible.

The old beaſts are grey about the head, and certainly live to a great age. They ſcratch their head and ears with their hinder paw, as the ſea cats do; and their manner of ſtanding, going, lying, and ſwimming, is the ſame. The great ones low like an ox, and the young bleat like ſheep: the old ones ſend forth a ſtinking ſmell, but not ſo much as the ſea cat. In winter and ſummer they do not always live indifferently upon all places; but ſeem to have their ſtations proper for the ſeaſon. They are never found further north than 56°, although in great plenty about *Kamtſchatka*, and the iſlands of the *American* coaſt. Their food is fiſh, ſeals, ſea beavers, or other water or land animals. The old ones eat little in the months of *June* or *July*, when they only lie and ſleep, and thence become very lean.

The ſea cat is about half the ſize of the ſea lion; in form reſembling the ſeal *, but thicker about the breaſt, and thinner

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* *Frederick Marten*, in his voyage to *Greenland*, thus deſcribes the ſea dogs, called *Robbs* or *Seals*: 'Their teeth are 'ſharp like dog's teeth; on their toes 'they have black, long, and ſharp 'claws; their tail is ſhort; they bark 'like hoarſe dogs, but their young mew 'like cats. When they are frightened by

/36 towards the tail. They have a ſnout longer than the ſea lion's, and larger teeth; with eyes like cows' eyes, ſhort ears, naked and black paws, and black hair mixed with grey, which is ſhort and brittle. Their young are of a bluiſh black colour.

The ſea cats are caught in the ſpring and in the month of *September*, about the river *Shupanova*; at which times they go from the *Kuriſkoy* iſland to the *American* coaſt: but the moſt

'by any noiſe, they hold up their noſes very high, and make a long neck like our greyhounds, and bark; and when thus alarmed we ſtrike them with half pikes, or long poles, upon their noſes, and knock them down half dead; but for all that they will recover themſelves and riſe again. Some of them will ſtand on their defence, bite at, and run after us. Sometimes they run from the ice to the water, and leave a yellow dung behind them, which they ſquirt out at their hunters. Their fat is about three or four fingers thick, and covers the fleſh juſt under the ſkin. They have great livers, lungs, and hearts. When they couple they are ſo fierce, that we are obliged to kill them from our boats, no man daring to go near them. One of them near eight feet long was not killed, though we had cut off moſt of his fat, and notwithſtanding all our blows would ſtill bite and ſnap at us. I ran another ſeveral times through the body with my ſword, which he did not in the leaſt regard; he at laſt got up, and ran ſwifter than I could, and flung himſelf off from the ice into the ſea, and went down to the bottom.'

From the ſame author we have alſo the following account of the ſea horſe. 'It is imagined that theſe animals, ſays he, feed both on herbs and fiſh; that they eat herbs we conclude from the reſemblance between their dung and that of the horſes', and we ſuppoſe they eat fiſh from this circumſtance, when we threw the ſkin and fat of a whale into the ſea, one of theſe creatures came and drew it under water with him. They are remarkable for their courage and ſtrength; and the reſolution with which they defend each other is ſurpriſing; for when any were wounded by my people, they made to the long boat, and with their great teeth cut holes in it under water, whilſt others moſt undauntedly erected half their body out of the water and endeavoured to get into the boat. In one of theſe engagements a ſea horſe took hold of our harpooneer with his long tooth by the waiſtband of his breeches, and had not the waiſtband broke, would certainly have pulled him over-board. At *Muff*'s iſland we killed ſeveral hundred of them, and made a very good voyage. When they are killed the ſailors only bring off the head, as nothing but the two great teeth are of any value; theſe alſo were formerly in greater eſtimation than they are at preſent.'

are

are catched about the cape of *Kronotzkoy*, as between this and the cape *Shupinskoy* the sea is generally calm, and affords them properer places to retire to. Almost all the females that are caught in the spring are pregnant; and such as are near their time of bringing forth their young are immediately opened, and the young taken out, and skinned. None of them are to be seen from the beginning of *June* to the end of *August*, when they return from the south with their young. The natives were formerly at a loss to conceive where such great herds of pregnant fat animals retired in the spring, and why they returned so weak and lean in the summer: they conjectured, that as they thus regularly swam from the south in the spring, and returned in the summer, their being so lean was owing to their fatigue.

The females bring forth their young there, and being at rest recover their former strength; they nurse their young ones three months, 'till they are able to return with them to their former habitations in the summer. The females suckle their young with two teats, which are placed between their hinder paws; they have seldom more than one; and when they bring forth they gnaw off the navel string like a dog, and greedily eat the after-birth. The young see when they are whelped, their eyes being as large as the eyes of an ox; and have thirty-two teeth, not reckoning their tusks, two of which are on each side, and begin to appear the fourth day after their birth. Their colour at the first is a dark blue; but in four or five days grey hairs begin to appear between their hinder legs, and at the end of one month their belly is black and grey. The male is born larger and blacker, and even continues blacker than the female, which turns almost of a blue colour as she grows up, having only grey spots between her fore legs. The male and female differ so much in the form and strength of their bodies, that one who does not carefully examine them would take them for different species of animals

136 mals; besides the females are mild and fearful. The male has from eight to fifteen, and even sometimes fifty females, whom he guards with such jealousy that he does not allow any other to come near his mistresses: and though many thousands of them lie upon the same shore, yet every family keeps apart; that is, the male, with his wives, young ones, and those of a year old, which have not yet attached themselves to any male; so that sometimes the family consists of 120. They likewise swim at sea in such droves. Such as are old, or have no mistresses, live apart; and the first that our people found upon *Bering*'s island were such old ones, and all males, extremely fat and stinking. These sometimes lie asleep a whole month without nourishment, and are the fiercest of all, attacking all that pass them; and their pride or obstinacy is such that they will rather die than quit their place. When they see a man coming near them, some of them rush upon him, and others lie ready to sustain the battle. They bite the stones that are thrown at them, and rush the more violently upon him who throws them; so that though you strike out their teeth with stones, or put out their eyes, yet even blind they will not quit their place: nay, they dare not leave it, for every step that any one moves off he makes a new enemy, so that though he could save himself from the attacks of men, his own brethren would destroy him; and if it happens that any one seems to retire the least, then others draw near no prevent his running away; and if any one seems to suspect the courage of another, or his design to run away, he falls upon him. This suspicion of one another is sometimes carried so far, that for a whole verst one sees nothing but these bloody duels; and at such a time one may pass them without any manner of danger. If two fall upon one, then some others come to support the weakest; for they do not allow of unequal combat. During these battles the others that are swimming in the sea raise their heads, and look at the success

of

of the combatants; at length becoming likewise fierce, they come out and increase the number. 136

Mr. *Steller* made this experiment:—With his Cossacks he fell upon one of these sea cats, and put out his eyes, and irritated four or five more by throwing stones at them. When these pursued him he ran towards the blind one, who hearing the running of his companions, and not knowing whom they pursued, attacked them. Mr. *Steller* retired to a high place, where he observed the battle for some hours. The blind one attacked without distinction all the rest, even those who took his part; so that at last they all fell upon him, and allowed him no rest either upon the land or in the sea, out of which they dragged him to the shore, and beat him until he died.

When two of them only fight, the battle lasts frequently for an hour: sometimes they rest awhile, lying by one another; then both rise at once, and renew the engagement. They fight with their heads erect, and turn them aside from one another's stroke. So long as their strength is equal they fight with their fore paws; but when one of them becomes weak the other seizes him with his teeth, and throws him upon the ground. When the lookers on see this they come to the assistance of the vanquished. The wounds they make with their teeth are as deep as those made with a sabre; and in the month of *July* you will hardly see one of them that has not some wound upon him. After the end of the battle they throw themselves into the water to wash their bodies. The occasions of their quarrels are these:—The first and most bloody is about their females, when one endeavours to carry off the mistress of another, or the young ones that are females; the females that are present follow the conqueror. The second is about their places, when one comes too near that of another, which they don't allow, either for want of room, or because they are jealous of their coming too near their

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136 their miſtreſſes. The third is owing to their endeavouring to do juſtice, and end the quarrels of others.

The male is very fond of the young ones; on the other hand, the females and young fear him extremely, and he treats them moſt tyrannically. If you endeavour to catch a young one, the male ſtands upon the defence, and the female is allowed to ſave herſelf and the young one by flight; but if ſhe drops the young one out of her mouth, the male leaves his enemy, and ſeizing upon her with his teeth beats her againſt the ſtones 'till he leaves her for dead. As ſoon as ſhe recovers, ſhe crawls to his feet, which ſhe licks and waſhes with her tears that flow in abundance. In the mean time, the male ſtalks backwards and forwards, gnaſhing his teeth, and toſſing his head like a bear; at laſt, when he ſees they have carried off the young one, he likewiſe begins to weep; for they ſhed tears, when they are much wounded or injured, and are not able to revenge the injury.

Another reaſon of the ſea cats going in the ſpring eaſtwards to the Deſert Iſlands muſt be, that reſting and ſleeping without nouriſhment for three months, they free themſelves from the fat which was troubleſome to them, in the ſame manner as the bears who live the whole winter without nouriſhment; for in the months of *June*, *July*, and *Auguſt*, the old ones do nothing but ſleep upon the ſhore, lying in one place like a ſtone, now and then looking at one another, and yawning and ſtretching, without meat or drink; but the young ones begin to walk in the beginning of *July*. When this animal lies upon the ſhore and diverts himſelf, his lowing is like that of a cow; when he fights, he growls like a bear; when he has conquered his enemy, he chirps like a cricket; but being vanquiſhed or wounded, he groans or mews like a cat; coming out of the water, he commonly ſhakes himſelf, ſtrokes his breaſt with his hinder paws, and ſmooths the hair upon it. The male lays his ſnout to that

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of the females, as if he was kiſſing her. When they ſleep in the ſun, they hold up their paws, wagging them as the dogs do their tails. They lie ſometimes upon their backs, at other times like a dog upon their bellies; ſometimes contracting, at other times extending themſelves. Their ſleep is never ſo ſound but that they awake at the approach of any perſon, how ſoftly ſoever he goes, and are preſently upon their guard; beſides their ſmell and hearing are ſurpriſingly acute. 136

They ſwim ſo faſt that they can eaſily make ten verſts in an hour; and when they happen to be wounded at ſea they ſeize the boats of the fiſhers with their teeth, and drag them along with ſuch ſwiftneſs that they appear to fly and not to ſwim upon the water. By this means the boat is frequently overturned and the people drowned, unleſs he who ſteers it be very ſkilful, and obſerves the courſe of the animal. As they have a *foramen ovale*, they can keep long under water; but when they grow weak they come to the top to receive freſh air. They often ſwim upon their back, and ſo near the ſurface of the water that their hinder paws are frequently dry. When they go from the ſhore into the water, or when they dive after having taken breath, they turn themſelves like a wheel, as many other large ſea animals do. They faſten their fore paws in the rocks, and thus draw up their body, which they can move but ſlowly in ſuch places, but upon a plain, one is in danger of being overtaken by them. Upon *Bering*'s iſland there are ſuch numbers of them that they cover the whole ſhore; ſo that travellers are frequently obliged for ſafety to leave the ſands and level country, and go over the hills and rocky places. It is remarkable that in this iſland the ſea cats are found only upon the ſouth coaſt which looks towards *Kamtſchatka*. The reaſon of this may be, that this is the firſt land they meet with going eaſt from the *Kronotzkoy* Noſs.

000 The manner of catching them in *Bering's* island was this: They first struck out their eyes with stones, and then killed them by beating out their brains with clubs: but this was a work of so much labour, that three men were hardly able to kill one with 300 strokes; and though sometimes the skull was broken in pieces, and the brains came out, and all their teeth beaten out, yet they would keep their place, standing upon their hinder paws, endeavouring to defend themselves. One of them thus miserably treated was left to see how long it would live, which it did full two weeks without quitting its place. 225 They seldom come ashore about *Kamtschatka*; so that the inhabitants chace them in boats, and throw darts or harpoons at them, which stick in their body; to this harpoon is fixed one end of a rope, and the other is in the vessel; and by this rope they draw them towards the boat; but here they are to be particularly cautious whenever they chace one, if he comes near, not to suffer him to fasten upon the side of the boat with his fore paws, and overturn it; to prevent which some of the fishermen stand ready with axes to cut off his paws. Several of these animals die of 136 old age, but the greatest part of the wounds they receive in the quarrels that happen among them; of which there are sometimes so many, that the shore is covered with bones.

The sea beavers * have not the least resemblance of the other beavers; but the people formerly gave them that name from their downy hair, which resembles that of the beaver. They are as large as the sea cats; their shape resembles the seal, and their head the bear; their fore feet are longer than their hind feet; their teeth small; their tail short and flat, and sharp towards the point; their hair is thick and black as pitch,

1. [the sea cats]

* Lutra marina.

but

but in the old ones it turns grey. The young ones have 136
their hair long, brownish, and very soft. This is the most peaceable of all the sea animals; it never makes any resistance, but endeavours to save itself by flight. The females are very affectionate to their young, and carry such as cannot swim upon their belly between their fore feet; for until the little ones can swim themselves the mother swims upon her back. When the fishermen pursue them, they never quit their young' till the very last extremity; and if they should happen to slip them they presently return to where they hear them cry; so that the fishers endeavour to kill or catch the young, as the most effectual method of taking their dams. They have three different ways of catching 225
them: 1st. By nets placed among the sea cabbage*, whither the beavers retire in the night time, or in storms. 2dly, They chace them in their boats, when the weather is calm, and kill them in the same manner they do sea lions or sea cats. The third method is upon the ice, which in the spring is driven on the coast by the east wind; and this last is so general, that when the ice is driven so strongly upon the shore that the people can pass upon it with snow shoes, they consider it as an acquisition of great treasure, and all the inhabitants upon the coast hunt and kill vast numbers, as they stalk along the ice seeking an opening to get into the water. However, such a drift of ice upon the coast does not happen every year, but when it does, they call it a good year; for the natives, Cossacks, and merchants, find a great advantage from this trade. The *Kuriles* did not 237
esteem the skins of beavers more than those of seals or sea lions 291
before they saw the value that the *Russians* put upon them; and even now they will willingly exchange a dress made of beavers'

* Fucus marinus.

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for a good one made of dogs' ſkins, which they think are warmer, and a better defence againſt the water.

Beſides thoſe already deſcribed, there are ſeveral other ſea animals here, the moſt remarkable of which is the manati, or ſea cow. This animal never comes out upon the ſhore, but always lives in the water; its ſkin is black and thick, like the bark of an old oak, and ſo hard that one can ſcarcely cut it with an ax; its head in proportion to its body is ſmall, and falls off from the neck to the ſnout, which is ſo much bent that the mouth ſeems to lie below; towards the end the ſnout is white and rough, with white whiſkers about nine inches long; it has no teeth, but only two flat white bones, one above, the other below; its noſtrils are near the end of its ſnout, in length and breadth about an inch and a half; they are double, and within are rough and hairy; its eyes are black, placed almoſt in the middle, and near in one line with the noſtrils, they are no larger than ſheep's eyes, which is certainly remarkable in ſuch a monſtrous creature; it has no eyebrows nor eyelaſhes; and its ears are only a ſmall opening; its neck is not eaſily diſcovered, the head and body being ſo nearly joined; however, there are ſome vertebræ proper for turning the head upon, which it actually does; particularly when it feeds, hanging its head like a cow; its body is round like that of a ſeal, being thickeſt about the navel, and growing ſmaller towards the head and tail; the tail is thick, and bent a little towards the end; it ſomething reſembles the beard of the whale, and ſomewhat the fins of a fiſh; its paws, which are under its neck, are about 21 inches long, with them he both ſwims and goes, and by them he takes hold of the rocks, to which he ſometimes faſtens himſelf ſo ſtrongly, that when he is dragged from thence with hooks he will leave the ſkin of his paws behind: it is obſerved that theſe paws are

ſometimes

ſometimes divided in two, like the hoof of a cow; but this does not ſeem to be common, only accidental. The females have two teats upon their breaſts. The length of the manati is about 28 feet, and its weight about 200 pood. Theſe animals go in droves in calm weather near the mouths of rivers; and though the dams oblige their young always to ſwim before them, yet the reſt of the herd cover them upon all ſides, ſo that they are conſtantly in the middle of the drove. In the time of flood they come ſo near the ſhore, that one may ſtrike them with a club or ſpear; nay, the author relates that he has even ſtroked their backs himſelf with his hand. When they are hurt they ſwim off to ſea, but preſently return. They live in families, one near another; and a family conſiſts of a male, female, ſome half grown, and one ſmall calf: hence it appears that every male has one female. They bring forth their young in the harveſt, and never more than one at a time. 136

They appear to be extremely gluttonous, eating ſo continually without any regard to their own ſafety, that they hardly ever lift their heads above the water; ſo that any one may go among them in boats, and chuſe which he pleaſes to carry off. The half of their body, that is their back and ſides, is always above water, upon which flocks of crows ſettle, and pick the lice out of their ſkins. They do not feed upon every herb, but, firſt, upon ſea cabbage *, which has a leaf reſembling ſavoys; ſecondly, upon cabbage † reſembling a club; thirdly, upon cabbage ‖ reſembling thongs; and, fourthly, upon a waved kind of cabbage ‡: and wherever they have been, though but for one day, heaps of roots and ſtalks are thrown out upon the ſhore.

* Fucus Coiſpus braſſicæ ſabaudicæ folio cancellatus. † Fucus clavæ facie.
‖ Fucus ſcuticæ antiquæ Romanæ facie. ‡ Fucus longiſſimus ad nervum undulatus.

When

136 When they have eaten their fill, they lie aſleep upon their backs. As ſoon as the ebb begins they retire to the ſea, fearing to be left upon the ſhore. In the winter time they are frequently cruſhed by the ice againſt the rocks, and thrown out upon the beach. This happens during a ſtorm, when the wind is upon the ſhore. At this ſeaſon they are ſo lean that one may count all
225 their ribs and vertebræ. They are caught with great iron hooks,
136 ſomething like the fluke of a ſmall anchor. This hook is carried by a ſtrong man in a boat with three or four rowers, who when he comes among the herd ſtrikes into one of them. Thirty men that are left upon the ſhore, and hold one end of a rope which is faſtened to the hook, draw the manati towards the land; and in the mean time thoſe that are in the boat ſtab and cut it 'till it dies. I once ſaw ſome of the fiſhers cut off the fleſh from the creature, while it was alive, who all the while ſtruck the water with its paws with ſuch force that the ſkin was torn off them; but at laſt it expired. It is eaſier to catch the old ones than the young: for the laſt are more active, and the ſkin being ſofter the hook frequently looſes its hold. When one of them is ſtruck, and ſtruggles to clear himſelf of the hook, thoſe of the herd that are neareſt to him come to his aſſiſtance: ſome overturn the boat by getting under it; others lay themſelves upon the rope, as if they could break it; and others endeavour to ſtrike out the hook with their tails, which ſometimes
136 ſucceeds. The love that is between the male and female is extraordinary; for after the male has uſed all methods to aſſiſt and reſcue the female, he follows her even dead to the very ſhore, and has been obſerved ſometimes even after two or three days to remain by the dead body. This animal cannot be ſaid to low, but rather brays hard, which is particularly obſervable when it is wounded. It cannot be ſaid how ſharp

their

their ſight or hearing is; but both ſenſes appear to be very weak, perhaps from their keeping their heads always under water. 136

There is ſuch a plenty of manati in *Bering*'s iſland, that it is ſufficient to maintain all the people of *Kamtſchatka*. Their fleſh, though it takes a long time to boil, taſtes well, and is ſomething like beef. The fat of the young reſembles pork, and the lean is like veal. This fleſh is eaſily boiled, and ſwells ſo much that it takes up double the ſpace when boiled that it did raw. It is impoſſible to boil the fat about the head and tail; but the ribs and back are very delicate. Some pretend that the fleſh of this animal will not keep in ſalt; but we found the contrary, it appearing to us little inferior to ſalted beef *.

Beſides

* That the *Kamtſchatka* manati is the ſame kind of animal with that found by Captain *Dampier* in the rivers of *South America* and at the *Philippine Iſlands*, is evident from that author's deſcription of it:

'This creature is about the bigneſs of a horſe, and 10 or 12 feet long. The mouth of it is much like the mouth of a cow, having great thick lips. The eyes are no bigger than a ſmall pea, the ears are only two ſmall holes on each ſide of the head. The neck is ſhort and thick, bigger than the head. The biggeſt part of this creature is at the ſhoulders, where it hath two large fins, one on each ſide of its belly. Under each of theſe fins the female hath a ſmall dug to ſuckle her young. From the ſhoulders towards the tail it retains its bigneſs for about a foot, then it groweth ſmaller and ſmaller to the very tail, which is flat, and about 14 inches broad, and 20 inches long, and in the middle four or five inches thick, but about the edges of it not above two inches thick. From the head to the tail it is round and ſmooth, without any fin but thoſe two before mentioned. I have heard that ſome have weighed above 1200lb. but I never ſaw any ſo large. The manati delights to live in a brackiſh water; and they are commonly in creeks or rivers near the ſea. 'Tis for this reaſon, poſſibly, they are not ſeen in the South Seas, (that ever I could obſerve) where the coaſt is generally a bold ſhore, that is, high land deep water close home by it, with a high ſea or great ſurges; except in the bay of *Panama*, yet even there is no manati: whereas the *Weſt Indies*, being as it were one great bay compoſed of many ſmaller, are moſtly low land and ſhoal water, and afford proper paſture (as I may

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136 Besides the above-mentioned animals, Mr. *Steller* saw upon the coast of *America* a new and uncommon sea beast, which he thus describes: Its length is about five feet; its head like a dog's; its ears sharp, and standing up; and its eyes large; upon its upper and under lips it has hairs like a beard; its make is thick and round; thicker towards the head, thin and small towards the tail; the whole body is covered with thick hair, grey upon the back, and red or sorrel towards the belly; the tail fin divides itself into two, the uppermost of which is longest. The author was extremely surprised that he could not discover any feet or paws, as in other sea animals. Its appearance in general was something like the draught of that creature, which *Gesner* gives under the name of sea monkey; and the author thinks that the name of monkey is not improperly applied to this animal for its remarkable activity and many tricks. It sometimes swam after their vessel for two hours, looking first at

'may say) for the manati. Sometimes 'we find them in salt water, sometimes 'in fresh, but never far at sea; and those 'that live in the sea at such places where 'there is no river nor creek fit for them 'to enter, yet do commonly come once 'or twice in 24 hours to the mouth of 'any fresh-water river that is near their 'place of abode. They live on grass 'seven or eight inches long, and of a 'narrow blade, which grows in the sea in 'many places, especially among islands 'near the main. This grass groweth 'likewise in creeks, or in great ri-'vers, near the sides of them, in such 'places where there is but little tide or 'current. They never come ashore, nor 'into shallower water than where they 'can swim. Their flesh is white, both 'the fat and the lean, and extraordinary 'sweet and wholesome meat. The tail 'of a young cow is much esteemed; 'but if old, both head and tail are very 'tough. A calf that sucks is the most 'delicate meat: privateers commonly 'roast them; as they do also great pieces 'out of the bellies of the old ones.

'The skin of the manati is of great 'use to privateers; for they cut them 'into straps, which they make fast on 'the side of their canoes, through which 'they put their oars in rowing instead of 'tholes or pegs. The skin of the bull, 'or of the back of the cow, is too thick 'for this use; but of it they make horse-'whips, cutting them two or three feet 'long: at the handle they leave the full 'substance of the skin, and from thence 'cut it away tapering, but very even, 'and square all the four sides. While 'the thongs are green they twist them, 'and hang them to dry, which in a 'week's time become as hard as wood.'

one

one thing and then at another with an appearance of ſurprize; and would come ſo near the ſhip, that he might be touched with a pole; but would retire to a greater diſtance on obſerving any on board to ſtir. He frequently raiſed one third of his body above the water, ſtanding erect like a man, ſometimes for half an hour together; and then darting under the veſſel, appeared in the ſame poſture on the other ſide; and this he would repeat, perhaps thirty times together. At other times he would bring a great *American* ſea herb, which is flat and hollow below like the bottom of a bottle, and ſomething ſharp above: this he would toſs about and catch again with his mouth, playing a thouſand apiſh tricks with it. It has been obſerved of all ſea beaſts, that the more they play in fair weather the greater ſtorm is to be expected. 136

CHAP. IX.

Of FISHES.

THERE are great numbers of whales both in this ocean and in the *Penſchinſka* ſea; they frequently ſwim within muſket-ſhot of the ſhore, and ſometimes will come cloſe to the very ſhore, perhaps to rub off the ſhell-fiſh that adhere to their bodies and give them no reſt; as plainly appears from their lying a long time with their backs above water, to allow the rooks and gulls to pick them off. At ſuch time as the fiſh come out of the ſea into the freſh waters, two or three whales are often found together at the time of flood near the mouth of the rivers.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 The whales here are from ſeven to fifteen fathoms long. We can give no account of the different ſpecies of whales at *Kamtſchatka*, few of them being caught here except in the northern parts by the *Koreki* and *Tchukotſkoi*, who feed upon their fleſh. In the year 1740 a whale was brought by the flood into the mouth of the *Bolſkoi* river; but ſome Coſſacks obſerving it, went out in boats, and cut it all to pieces; ſo that next day when I came, to my great diſappointment, I neither found fleſh nor bones; for theſe people, who had cut off the fleſh, being afraid of puniſhment for doing it without permiſſion, had buried the bones to conceal their crime. *Steller* obſerved that more whales were thrown on the eaſtern than on the weſtern ſhore, and more in the harveſt than in the ſpring.

225 The different people have different ways of catching them: 171 the *Kuriles* by throwing their poiſoned darts into them: the *Olutores* catch them in nets, made of thongs of the ſea horſe ſkin as broad as a man's hand, which they dry in the ſmoke. Theſe they ſet in the mouths of the rivers, and the whale purſuing other fiſh entangles himſelf in them. With theſe thongs he is dragged to the ſhore by the h-'r of numbers who aſſemble on theſe occaſions, and always p.rform certain ceremonies. They bring out of their common huts a wooden whale about two feet long; then building a new hut they place this image in it, uſing ſeveral conjurations. After this they light a lamp, and appointing ſome people to look after it, give orders that it be not allowed to go out from ſpring to harveſt, which is as long as the fiſhing ſeaſon laſts. They then cut the whale into different portions, which, looking upon it as their moſt delicate proviſion, they prepare in the following manner:—They dry the lean in the ſun; and the ſkin, which they ſeparate from the fat, they beat with hammers, and of it make ſoles to their ſhoes, which wears extremely well. They ſmoke the fat parts, and

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

and cleaning the guts, they fill them with the oil which runs in cutting the fish, or which they melt from the blubber, having no other vessels to keep it in. 171 225

The *Tchukotskoi* kill whales with a harpoon in the same manner as the *Europeans* do, and they catch so many that they never eat those whales that are thrown dead on shore, as some of the neighbouring people do, but only extract their fat for burning. Although the *Tchukotskoi* have large herds of deer, which might be sufficient for their sustenance, yet they are the greatest whale fishers of any people in this part of the globe, and look upon the fat of the whales as the greatest delicacy; besides, having great scarcity of wood, they use it for burning. They make themselves shirts of the intestines of the whales, like the *Americans*; and use them for vessels, like the *Olutores*.

The kasatki, (falsely called the sword-fish) which are numerous in these seas, are very useful to the inhabitants, for these fish frequently either kill or drive the whales on shore. *Steller* had an opportunity of seeing an engagement between the kasatki and whale, both at sea and upon *Bering*'s island. When the kasatki attacks the whale he makes him roar so that he may be heard some miles. If the whale makes off, the kasatki follows him at some distance 'till great numbers of them gather together, and make a general attack. It is never observed that such whales as are thrown on shore have any part eaten out of their bodies; so that this war between the whales and the kasatki must proceed only from a natural enmity. The fishers are so much afraid of these animals that they not only never throw any darts at them, but if possible avoid going near them; nay, they even make offerings to them, begging that they will not hurt them: for if irritated they sometimes overturn their boats. 136 825

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225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 136 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

There is likewise another creature in these seas resembling a whale, but smaller and slenderer: the *Russians* call it a wolf, and the *Kamtschadales*, chethak. Its fat is of such a nature, that, when swallowed, it presently passes insensibly. The natives sometimes use it as a medicine in case of costiveness, but oftener to play tricks with one another. They feed upon the flesh and tongue, which have not the same quality. 136 278 262 522

Notwithstanding the great plenty of whales upon this coast, the scarcity of food is sometimes so great, that whole villages die of hunger. In the month of *April*, 1739, I saw a melancholy instance of their being obliged, out of necessity, to eat some poisonous whale's fat, at a village upon the river *Berosover*, called *Alaune*, where I observed the people all look pale, as if they had been sick for a long time; when I asked the reason, I was told, that just before my arrival one of the natives was killed by eating of whale's fat; and as all the rest had eat of the same, they dreaded the same fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the physicians there, fastened him with ropes to a ladder, and placed themselves on both sides of him with great clubs in their hands, with which they tossed firebrands out of the huts, and the wife of the sick person coming behind him, made several conjurations over his head, begging death to spare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly surprise me; I rather wondered that such things did not happen oftener, especially from those whales which are killed with poisoned darts. However the *Kamtschadales* think so little of the consequences, that they had rather risk their lives than be deprived of the pleasure of eating whale's fat. 262 755 278

After the whales, we must mention the fish * mokoe, which at *Archangel* is called akula. It is about three fathoms long; 136

* Canis Carcharius Autoris.

brings

136 brings forth its young alive, like the whale; and when its mouth is ſhut has ſome reſemblance of a ſturgeon, but its teeth are very different, being large and terrible. The *Kamtſ-*
262 *chadales* eat the fleſh of this fiſh, and though it appears to
825 be tough and ſtrong, they ſay it is exceedingly well taſted. The guts, and particularly the bladder, are in high eſteem; ſo that when they catch this fiſh, they never call it by its name, for fear, as they imagine, they ſhould provoke it to burſt its bladder, and render it uſeleſs to them. The teeth are ſold under the name of ſerpents' teeth.

136 Several fiſhes which are common to other ſeas are found here;
262 as pike, eels, lampreys, cod, and very fine ſoals in great plenty;
231 but the inhabitants make no account of theſe fiſh, and never uſe them unleſs in great neceſſity, or to feed their dogs. Mr. *Steller* obſerved four different ſpecies of flat fiſh.

There is a fiſh called * vahnae, which is a ſpecies of the cod; is round and thick, with three fins upon its back; and when taken out of the water is of a copper-colour, but preſently changes to yellow: its fleſh is white, but ſoft, and of a diſagreeable taſte; however the inhabitants eat more of it, than of other fiſh which are much better taſted; the reaſon indeed is, that they catch this fiſh in the beginning of the ſpring, when they can catch no other; a great deal of which they dry in the ſun uncleaned, deſigning it as proviſion for their dogs.

136 I ſaw the fiſh which they call † terpuk, but it being dry, I could not obſerve thoſe fine colours which Mr. *Steller* deſcribes. By his deſcription its back is blackiſh, its ſides are reddiſh, and chequered with fine ſilver-coloured ſpots; ſome of which are ſquare, and others circular: in its ſhape it reſembles the perch.

1. [mokoe or Canis Carcharius Autorum]

* Onos vel Aſinus Antiquorum.

† Doecogrammos Stelleri.

They

They angle for this fish near the *Kurilski* islands, and the haven of *Awatscha*, with hooks made of bone or wood. 136

There are likewise several other kinds of fishes in these seas which are not very common in other places; but as they make no part of their nourishment, and are seldom caught, I shall take no notice of them, my design being only to mention such as serve for food to the inhabitants, in this country which produces no grain. The chief of these are salmon of different kinds, which during the summer come in shoals from the sea up the rivers. Of these they make what they call *eukol*, which they use instead of bread; and they boil up the fat, which serves for butter. They likewise make glue of them. 136 262 237

Before I give a particular description of each species apart, I would communicate some observations which regard the catching of these fish, and which indeed are wonderful proofs of the Divine Providence and the goodness of the Creator, who has blest a place with such abundance of fish where there is neither cattle nor grain. 136

In *Kamtschatka* the fish come from the sea in such numbers, that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink. At this time the bears and dogs catch more fish with their paws than people do at other places with their nets. All the fish that swim up the rivers are of the salmon kind, and are commonly called red fish; but the several sorts are so distinct from each other, that *Kamtschatka* alone is thought to produce as many different species as are to be found in all the world besides. Not one fish remains in *Kamtschatka* longer than six months (except gudgeons); for all that are not caught before the end of *December* die, except in some few deep places where there are warm springs. It is observed of all the different species of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 of ſalmon in *Kamtſchatka*, that they are brought forth and die in the ſame river, come to their full growth in the ſea, and ſpawn only once during their whole lives: for which purpoſe they ſwim up the rivers, and having found a proper place in ſmooth water, they make a hole with the fins that are under their gills, and there depoſit their roes.

In *Siberia* the red fiſh live in clayey rivers; they remain there ſeveral years, and generate every year, having numbers of inſects proper for nouriſhment. They winter in deep pools, and in the ſpring ſwim further up for the ſake of propagating in the mouths of little rivulets that fall into the great rivers, where they are commonly caught. The young fry ſwim down to the ſea, where they continue 'till they come to their full growth, which Mr. *Steller* thinks is in the third year; and then they return in order to propagate. It is remarkable that thoſe fiſh which are bred in a great river continue in the ſea near to its mouth, feed upon things brought down by the ſtream, and when the time of ſpawning approaches they will enter no river but that which produced them. It is alſo very extraordinary, that thoſe fiſh which come up the rivers in the month of *Auguſt*, though they have time enough to ſpawn, yet as there remains but little time for their young to return, take a year-old fiſh of their own kind, which continually follows the male and female; and when the old have covered the roes they continue to aſcend, the young one, which is no bigger than a herring, guarding them 'till the month of *November*, at which time it returns with the other fiſhes. It is very probable that the ſame thing happens in *Europe*, which may have given occaſion, through the difference of their ages, to account them of different ſpecies.

Each kind of fiſh always aſcends the rivers at the ſame time. In the month of *Auguſt* ſometimes two, three, nay even four ſpecies come up at once; but each keeps ſeparate from the other.

The

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught. 136 825 805

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled. 136

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe. 136 226 262

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not 136

136 to be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn
262 about the thickness of sugar ropes; and the fishing begins about
576 the middle of *May*, and lasts six weeks. The *Kamtschadales*
574 esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about
136 the middle of *June*. The *eukol* that is made of it, though very
226 pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the shoals appear at the mouths. The second is, that this fish is more plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into these rivers that communicate with the lakes. Here the inhabitants catch them by nets, dams, or other methods.

1. [chivatsi]

The

The third kind of this fish is called keta or kacho; which is somewhat larger than the narka. The flesh is white; the head flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *cuhol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas. 136 262

The gorbushe, or crook back, follows or sometimes accompanies the keta. This fish is more plentiful than any other whatever; it is about eighteen inches long, and flattish; its flesh is white; its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs. 136 262 231

The last of these kinds that come on shore is called white fish. This fish both in bulk and appearance is very like the keta; they differ in this indeed, that the keta has no spots, and the white fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have spawned, they take all care to provide for their own safety, retiring immediately to deep places where there are warm springs; and they are chiefly found in the springs near the *Bolscheretskoi* river 136 825 226 136 226

136 and the *Opalsky* lake: they are caught likewise during the whole
226 winter in those springs that run into the *Kamtschatka* from the south; and near to where the old lower fort of *Kamtschatka* stood they also abound, which is a great relief to the inhabitants. I myself was at this fishery in the end of *February*; however I found the fish at that time dryer and not so well tasted as in the harvest. This fish eats very well, either salted, dryed, or smoaked. It is caught frequently in the same net with the keta
227 and narka; and those which they use for this fishery are made of yarn about half as thick as that with which they make the nets for the chavitsi, and the meshes are about an inch and a half wide.

136 All these different species of fish change their colours, turn lean and ugly, their snout bends, their teeth grow, and a scurf appears upon their skins. The chavitsi, narka, and white fish, change their silver colour to a red; the keta turns likewise red, stained with black stripes. Their fins and tails become reddish and blackish; in one word, they would never be taken for the same fish that enter the rivers, if these changes were not certain. The gorbushe alone preserves its silver colour, and, whenever it loses that, it dies.

It is incredible with what eargerness they go up the rivers, particularly the gorbushe. When they come to any place where the stream is strong, and those that are weak find it impossible by their own strength to get up, they fasten their teeth upon the tail of some that are stronger, that they may be drawn up by them; so that several of these fish are found which have their tails bitten.

The true salmon may always be reckoned one of those fish that come in shoals; and are found to go up the rivers *Kompakfve*, *Bircumkin*, and *Etchi*. I never saw these fish indeed, but have heard a great deal of them. Mr. *Steller* writes, that when

when they return to the ſea, it ſometimes happens that they are driven by a ſtorm from the mouth of their native river, ſo that loſing their way, the following year they aſcend a ſtrange river, which is the occaſion of their being found in more plenty in ſome rivers one year than another. 136

There are other kinds of red fiſh which come up the river without any order, and live there the whole winter before they return. Mr. *Steller* ſays, they ſtay ſometimes four or five years. The firſt of this ſpecies is called, at *Ochotſka*, malma, and at *Kamtſchatka*, goltſa. When they come out of the ſea their colour is clear like ſilver; the upper part of the ſnout is blunt, and ſomewhat bent; the lower ſharp, and bent towards the upper. When they are ripped up, and the roes taken out, there appear upon the ſides round red ſpots of different magnitudes, the belly and lower fins become likewiſe reddiſh, except the bones which continue white.

The largeſt fiſh of this ſpecies, which lives ſometimes five or ſix years, comes from the ſea into the river *Kamtſchatka*, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almoſt as big as the chavitſi, though it ſeldom weighs more than twenty pounds. They are found likewiſe very large in the *Biſtroy* river; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour, have large teeth, and the lower jaw is crooked with a knob: it ſeems indeed of a different ſpecies. Theſe of three years old, which have been one year out of the ſea, have a long head, are of a ſilver colour, with ſmall ſcales, and ſmall red ſpots; and ſuch as have been two years out of the ſea are round and longiſh, with ſmall heads, and their fleſh, which is of a reddiſh white, is hard and well taſted. With regard to their ſize; the firſt year they are long and ſmall; the ſecond, they grow more in breadth than in length; the third, the head grows conſiderably; and the fourth, fifth, and ſixth years, their breadth and thickneſs increaſes

greatly

136 greatly: this obſervation probably holds in all kinds of ſalmon
226 trouts. In the fourth year alſo, the lower part to the ſnout be-
251 comes hooked. This ſpecies of fiſh[1] ſwims along with the gorbuſhe, and is caught with it in the ſame net, which is wove of ſmall yarn, the meſhes being about an inch wide. Such as live in the rivers are nouriſhed by the roes of other fiſh; and in the ſummer are found near the heads of ſmall rivers, which they leave in the ſpring. Such as are caught at the beginning of ſummer are ſalted, but thoſe caught later are frozen for the winter.

136 Another ſpecies of fiſh is called muikiſi, and is about the bigneſs of the narka; its ſcales are pretty large; its head is of a middling ſize; the upper part of its ſnout is like that of the goltſa, with the lower part hooked; it has teeth in its jaws and on the ſide of the tongue; its back is blackiſh, marked with round, or ſemicircular black ſpots; and upon each ſide has a large red ſtripe, which goes quite from the head to the tail: this diſtinguiſhes it from all the other ſpecies of this fiſh: it ſwallows all kinds of naſtineſs, and often catches the field mice that happen to ſwim upon the river; and is ſo particularly fond of the nortleberry, that if it ſees any growing upon the bank, it throws itſelf out, and ſeizes either the berry or the leaf of the plant. It is a well taſted fiſh, but is not caught in ſuch plenty as others are. They do not certainly know the time of its entering the rivers, but imagine it is before the ice is gone.

There is a third kind called kunſha, which is about three feet long; the head makes a ſeventh part of the length; the ſnout is ſhort and ſharp; its jaws are furniſhed with teeth; its back and ſides blackiſh, marked with yellow ſpots, ſome of which are round and others oblong; its belly is white; its lower fins and tail blue; and the fleſh white and well taſted. In *Ochotſka* it ſwims in ſhoals, but at *Kamtſchatka* it is more rare, and conſequently more eſteemed.

1. [Goltza]

The

The fourth ſpecies is the harius, which is well known in *Siberia* and all *Ruſſia*; but thoſe that are here have the back fin longer than the others. Mr. *Steller* writes, that they come up into the rivers upon the firſt going off of the ice; but I never happened to ſee this fiſh in *Kamtſchatka*. 136

There is another ſpecies of red fiſh which reſembles the golſta, with this difference, that its head is larger, and the upper part of the ſnout a little hooked; its ſides are marked with red ſpots, like the malma: it is ſeldom longer than 20 inches.

Among the ſmall fiſhes which the *Kamtſchadales* feed upon are three ſpecies of ſmelts; one of which is called hagatch, the ſecond innaka, and the third uiki. The hagatch is our common ſmelt. The innaka differs from it a little, and is found in great plenty about the lake *Nerpech*. Uiki is thrown ſometimes upon the ſhore in vaſt heaps for 100 verſts together. They are eaſily diſtinguiſhed from the other ſpecies by a rough ſtripe that goes down the ſide. They commonly ſwim three together, and are ſo joined by the afore-mentioned rough ſtripe, that when you catch one the others cannot eaſily diſengage themſelves. The *Kamtſchadales* dry this fiſh as food for their dogs; but in caſe of ſcarcity they uſe it themſelves, although the taſte is very diſagreeable 136 231 262

The laſt kind of fiſh which we ſhall mention is the herring: theſe are found in great plenty in the Eaſtern Sea, but very ſeldom in the bays which lie upon the *Penſchinſka*. In my opinion they don't differ in the leaſt from the herring which we have in Europe; which Mr. *Steller* likewiſe confirms. In the harveſt they are found in large lakes, where they breed and winter: in the ſpring they ſwim towards the ſea. The greateſt fiſhery of them is in the lake *Viliutchin*, which is only about fifty fathom from the ſea, and has communication with it by a ſmall outlet. When theſe herrings enter the lake, this paſſage is ſhut up by the ſand being thrown into it, and remains ſo 'till the month of 136 226

March,

136 *March*, when it is washed away again by the high water arising
226 from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other sorts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make less use of them than of roots and fishes:
433 the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

CLASS I. *Of the* SEA FOWLS.

The ſea fowls are found in greater plenty about the coaſt of the Eaſtern Ocean, than that of the *Penſchinſka* ſea; for the coaſt of the Eaſtern Ocean is more hilly and convenient for breeding. 136

The ipatka * is well known to all writers of natural hiſtory by the name of anas arctica, commonly called in *England* puffins. It is found upon the coaſt of *Kamtſchatka*, and the *Kurilſki* iſlands, and even upon the *Penſchinſka* bay, almoſt as far as *Ochotſka*. It is about the bigneſs of, or rather ſmaller than, a common duck; its head and neck are of a bluiſh black; the back is black; the belly and all below white; its bill red, and broad towards the root, but ſomewhat narrower towards the point; upon each ſide are three furrows; its legs are red, its feet webbed, and its nails ſmall, crooked, and black; its fleſh is hard; its eggs are like hen's eggs; it builds its neſt with graſs on the cliffs of the rocks. The *Kamtſchadales* and *Kuriles* wear the bills of theſe birds about their necks faſtened to ſtraps; and, according to their ſuperſtition, their ſhamans, or prieſts, muſt put them on with proper ceremony, to procure them good fortune. 777 825

Another ſpecies of theſe birds is called meuchagatka †, and in *Ochotſka*, igilma: this only differs from the former in being all black, and having two yellowiſh white tufts upon its head, which lie all along from its ears to its neck like locks of hair. To the beſt of my remembrance this bird has never yet been deſcribed. Mr. *Steller* and I ſent ſome of theſe ſpecies of birds to the Imperial Muſeum. Among thoſe ſent by Mr. *Steller* there was a third kind which is found upon the iſland *Bondena*, in *Angermannia*, and upon the *Caroline* iſlands; and is ſome- 136

* Alca roſtri ſulcis quatuor, oculorum regione temporibuſque albis. LINN. *F.* ſuec. v. 42.

† Alca monochroa ſulcis tribus, cerro duplici utrinque dependente. Anas arctica cirrata. STELL.

136 what leſs than the other two; its colour is like that of the ipatka, except that its bill and legs are black, and that there are two white ſprigs upon its forehead, which reach from the eye to the bill.

The aru *, or kara, belongs to this claſs. It is larger than a duck; the head, neck, and back are black; the bill long, ſtrait, black, and ſharp; the legs black with a caſt of red; it has three black toes, and is web-footed. Great numbers of 237 theſe are found upon the rocky iſlands; and the inhabitants kill 262 them for the ſake of their fleſh, though tough and bad taſted; but more ſo for their ſkins, of which, as well as thoſe of other ſea fowls, they make themſelves garments. Their eggs are reckoned a great delicacy.

136 There are two kinds of tchaiki, or cormorants, found upon this coaſt, which are hardly obſerved any where elſe. They are about the bigneſs of a gooſe, have a ſtrait reddiſh bill about five inches long, and ſharp on the edges, and four noſtrils, ſuch as other cormorants have, two being near the forehead as are found in other birds which are thought to prognoſticate ſtorms, and are thence named Procellaria; their heads are of the middling ſize; their eyes black; their tails eight inches long; and their legs are covered with hair to the knees, but below them are bare; they have three toes of a bluiſh colour, and are web-footed; their wings extend more than a fathom; they are ſometimes ſpeckled; they appear often near the ſhore, but can't ſtand ſtrait upon dry ground, their feet being ſo near the tail that they are not able to balance their bodies: they fly ſlow even when hungry, but when full of meat they cannot raiſe themſelves from the ground; and, having eat too much, they eaſe their ſtomachs by throwing it 237 up; they have a wide throat, and ſwallow fiſh whole; their fleſh is very tough and ſinewy, therefore the natives ſeldom eat it, but in great neceſſity, killing them principally for the ſake of their

* Larus Hoieri.

bladders,

237 bladders, which they use instead of corks to their nets. The
223 way of catching them is singular, being angled for as fishes are, in the following manner: they fasten a thick iron, or wooden hook to a long rope or strap, baiting the hook with a whole fish, the point of which comes out near the back fin, and then throw it into the sea; this the cormorants observing gather about it in flocks, and quarrel among themselves who shall have the prize, until the strongest obtains it and swallows it; then being drawn on shore, they take out the hook and bait by putting their hands into its throat. Sometimes they fasten a live cormorant, which they call a decoy, to the rope, and that it may not swallow the bait, tie down its bill with a cord: the others seeing the decoy swim so near the shore, come with greater security to the bait. The *Kamtschadales* make needle cases, and combs to comb their nettles, of the bones of their wings.

136 Besides the above-mentioned tchaiki, or cormorants, there is another species which haunt the rivers: these are called robbers, because they take the prey from the small birds; their tail is forked like that of the swallow.

136 The procellaria, or storm birds, are about the bigness of a
787 swallow; their feathers are all black, except the tops of their wings, which are white; their bill and legs black. They haunt about the islands, and before a storm they fly low and skim the sea, and sometimes into the ships, which the sailors look upon as the sign of an approaching violent gale.

136 The stariki *, or glupisha, belong to this species. The stariki are about the bigness of a pigeon; have bluish bills, and bluish black feathers about the nostrils, which look like bristles; the feathers of the head are of the same colour, interspersed here and there with white ones, which are longer and thinner than the rest; the upper part of the neck is black, but the lower black and

* Mergus marinus niger ventre albo, plumis angustis albis auritus. STELL.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 white ſpeckled. The belly is white, the wings ſhort, the large feathers of which are black, and the reſt blue; the ſides and tail are black; the feet are red and webbed; and the nails black and ſmall: it 223 haunts about rocky iſlands, where it likewiſe builds its neſt: The *Kamtſchadales* catch theſe fowls eaſier than they do the tchaiki, or cormorants: they put on a fur-coat of a particular make, and letting their hands fall down, ſit down in a proper place, and wait for the evening; when the birds returning from the ſea ſeek to retire into holes for the night, and in the dark ſeveral of them fly into their furs, and are caught.

136 Among the birds deſcribed by Mr. *Steller* are the black ſtarikis *, whoſe bills are as red as vermillion, the right ſide of which is crooked; it has a white tuft upon its head. He ſaw a third ſpecies in *America*, which was ſpotted black and white.

The glupiſha are about the largeneſs of the common river cormorants; and are found upon the rocky iſlands, in high ſteep places; their colours are grey, white, and black; and are perhaps called glupiſha, that is, fooliſh, becauſe they frequently fly 237 into the boats. Mr. *Steller* ſays, that numbers of them are caught 223 in the fourth and fifth *Kurilſki* iſlands, which the inhabitants dry in the ſun; they ſqueeze the fat through the ſkin, which paſſes very 136 eaſily, and uſe it for burning. He likewiſe writes that all the rocky iſlands in the ſea between *Kamtſchatka* and *America* are covered with them. He has ſeen ſome as large as a gooſe, or an eagle; their bills are crooked and yellowiſh; their eyes are large like thoſe of an owl; they are black intermixed with white ſpots over the whole body. He once ſaw, 200 verſts from land, great numbers of them feeding upon a dead whale, which ſerved them alſo to appearance for lodging; and in his paſſage through the *Penſchinſka* ſea, he ſaw many of the glupiſha, ſome of which

* Mergulus maximus alter totus niger cristatus, rostro rubro. STELL.

were

were black, and others white; but none of them came so near the 136
vessel as to be exactly observed.

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone 136
foxes, who watch for them; they breed in the month of *July*; 222
their eggs are green, about the bigness of a hen's egg, and 223
being boiled thicken a little, but are ill tasted; however the *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these crea- 252
tures are so void of apprehension, that, though they see the 262
next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

* Columba Groenlandica Batavorum. STELL.

† Corvus aquaticus maximus crissatus periophtalmiis cinnaberinis, posteriore candidis. STELL.

much.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

252 such a manner that, as victuals are there, it is not bad; they
262 roast it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roasted, they skin and eat it.

825 The natives say that these birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noise to the sound of a trumpet.

136 CLASS II. *Of those Birds which haunt for the most part about*
223 *the fresh Water.*

The first of this class is the swan, which is so common in *Kamtschatka*, both in summer and winter, that the poorest person can have no entertainment without a swan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in those rivers that do not freeze.

136 Here are seven kinds of geese, which are distinguished thus: large grey geese, gumenniki, short necks, grey and speckled, white necks, small white geese, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr: *Steller* says; who likewise writes, that they come from *America*, and that he himself saw them pass *Bering*'s island in great flocks, flying east in the harvest and west in the spring. In *Kamtschatka* are principally found the large grey geese, the gumenniki, and the grey and speckled; the small white goose is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vast numbers of them; and the best down
223 is brought to *Jakutski* from these places. They catch them at the time they cast their feathers, in the following manner:— They build huts with two doors, near those places where they most commonly sit at night. The fowler putting a white shirt on, above his cloaths, steals as near the flock as he can; and shewing himself

1 [Urile, Corvus aquaticus maximus Cristatus periophtalmiis Cinnabarinis, postea Candidis. Stell.]

himself he creeps away upon his hands and feet towards the 223
hut: then going through it, and observing that the geese have followed him, he shuts the door behind him, and running round he comes in at the other door, which shutting likewise, he encloses all the geese.

Mr. *Steller* observed in the month of *July* upon *Bering's* 136
island an eighth kind of geese, about the bigness of the white speckled Its back, neck, and belly were white; its wings black; its cheeks white, yet somewhat greenish; its eyes black, with a yellow ring; the bill has a black stripe round it, and is red, with a knob like the *Chinese* or *Muscovy* geese: this knob is bare and yellowish, except that along it there is a small stripe of bluish black feathers. The natives report that this sort of geese is likewise found upon the first *Kurilskoy* island; however they were never observed upon the continent.

The people of *Kamtschatka* have different methods of catching 223
geese when they cast their feathers; sometimes they pursue them in boats; sometimes they hunt them with dogs; but most of them are caught in pits, which they dig near those lakes where the geese haunt, and cover up carefully with grass: these the geese coming upon the shore fall into, and are caught.

There are eleven different species of ducks in *Kamtschatka*; 136
namely, the selesni, sharp tails, tcherneti, plutonosi, svasi, krohali, lutki, gogoli, tchirki, turpani, and stone ducks: of which the selesni, tchirki, krohali, and gogoli, winter among the springs; all the rest come in the spring, and fly away in harvest, as the geese do.

The sharp tails are of that kind which writers call the *anas caudacuta, sive havelda islandica.* They haunt in the bays of the sea, or about the mouths of great rivers: they swim in flocks, and with their cry, which is extraordinary, make no disagreeable musick. Mr. *Steller* writes, that the larynx, or lower part of their throat, has three openings, covered with thin

136 thin membranes. The natives call this fowl aangitch, from their manner of crying.

The turpan is called by writers the black duck *. They are not so numerous about *Kamtschatka* as at *Ochotska*, where they are caught in great plenty about the equinox. Fifty or more of the natives here going out in boats surround a whole flock, which in time of the flood they drive into the mouth of the river *Ochotska*; and so soon as it begins to ebb, and the water in the bay turns low, all the inhabitants fall upon them, and kill them with clubs in such numbers, that every one gets 20 or 30 for his share.

The stone ducks † have not hitherto been observed in any other place; they breed in the summer time in the rivers. The drakes are particularly beautiful, their head being like black velvet, and having two white spots upon their nose, which extend beyond the eyes, and end in a clay-coloured stripe behind their head: there is a small white spot near each ear; their bills are broad and flat, like those of other ducks; they are of a bluish colour, and their necks of a bluish black; upon their breasts are black feathers with a white border below; the feathers are smaller and broader above; the fore part of the back and belly are bluish, but more blackish towards the tail; across both wings are broad white stripes with black borders; their sides, under the wings, are of a clay colour; the large feathers of the wings, except six, bluish; these are black and roughish like velvet; the two last are white with black borders, and the second row of the large wing feathers are all black, the third grey, two only of these feathers having white spots upon their ends: their tails are sharp, and their feet pale coloured: they weigh about two pounds. The female is far from being so beautiful: her feathers are black, each

* Anas niger. WILLOUGHBY.
† Anas picta capite pulchre fasciato. STELLER.

being

being ſomewhat yellowiſh at the end, with a ſmall white ſtripe; the head is black, and upon its temples are ſmall white ſpots: it weighs about a pound and a half. 136

In the harveſt the females are found in the rivers, but none of the drakes: they are very ſtupid and eaſily caught where the waters are clear and ſhallow, for they do not fly away at the ſight of a man, but only dive, and therefore may be eaſily killed with poles, as I myſelf have frequently done. Mr. *Steller* ſaw ſeveral of this kind of ducks in the *American* iſlands.

They catch the ducks with nets in the following manner: in a wood that happens to ſtand between two lakes, or between a lake and a river, they cut a ſtrait paſſage, through which the ducks fly during the ſummer; here in the harveſt, when the fiſhery is over, the natives faſten to long poles ſeveral nets, which in the evenings they raiſe as high as the ducks are uſed to mount: round the nets a ſtring is drawn, by which they can reef them together, as ſoon as they find the ducks entangled; but they ſometimes fly with ſuch force and in ſuch numbers, that they break through. They likewiſe catch them in ſmall rivers with nets ſtretched acroſs the ſtream: but this is a method not peculiar to *Kamtſchatka*. 223

To this claſs belongs likewiſe the gagari, or columbus, of which there are four ſpecies *, three of which are large, and the other ſmall: the firſt of the largeſt has a tail; the ſecond a clay coloured ſpot upon its neck, a little above the crop: the third is called by *Wormius*, the northern lumme; and *Marſilius* calls the fourth the little lumme. The natives pretend to foretel the change of weather by their crying and flying; for they think that the wind muſt always blow from that point towards which they fly: however they are frequently deceived in their judgment. 136 825 787

* 1. Colymbus maximus. Gesn. Stell. 2. Colymbus arcticus lumme dictus. Worm. 3. Colymbus macula ſub mente caſtanea. Stell. 4. Colymbus ſive pedicipes cinereus. *Ejuſdem.*

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tunguſi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkovoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kurilſki* languages.

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A LIST *of some* PLANTS, BEASTS, FISHES, *and* BIRDS; *with their Names in the* English, Russian, Kamtschatka, Koratski, *and* Kurilski *Languages.*

English	*Russian*	*Kamtschatka*	*Koratski*	*Kurilski*
PLANTS.				
The birch tree	Berefnick	Hehy	Lagune	
Poplar	Topfucke	Thilpiai	Yakal	
Willow	Vetelnicke	Liumtche	Tekile	
Alder	Olchofnike	Sikiss	Nikilious	Affe
Service tree	Rebenike	Kaihine	Eloene	Koruneni
Juniper	Mofhevelnike	Kahaine	Valvakitche	Pakzepniremamal
Cherry laurel	Tchelemafnike	Kalhame	Eloene	
Dog brier	Shipovnike	Kavafhe	Pitctakachatche	Kapokone
Honeysuckle	Shimfiede	Lufhinike	Nitchivoy	Eaumetam
Barberries	Boiarifhnike	Horatenuse	Pitkitche	
Brambleberries	Morafhka	Shiie	Etiette	Apoumenipe
Wortleberries	Golubitfa	Ningule	Liagule	Eaumacots
Cranberries	Klinkva	Tchikume	Emelkevina	Afitte
Bulberries	Briufnitou	Tchahaube	Tiunaane	Nipopkipe
BEASTS.				
Sea calves	Tiulenne	Kolha	Memele	Retaftore
Sea beaver	Bobri	Kaiku	Kalaga	Rahku
Sea cat	Ketti	Tatlatche	Tatatche	Ounepe
A fox	Lifotfa	Tchafhiai	Yaivne	Kimatpe
Sables	Cobali	Kemhime	Kitighime	Na
Ermines	Gorsoflai	Doitchitche	Imabuhake	Taanerume
A wolf	Volka	Kitaia	Eglinguue	Orgia
Bear	Medved	Kafha	Kainga	These beasts are not known in the Kurilski islands
Glutton	Raffamak	Timmi	Haeppi	
Marmotta	Evrafhka	Cired3tche	Gilaak	
Elk	Oleni	Eluahappe	Lugaki	
Stone ram	Kammenoi barenu	Guadinadatche	Kiripe	
FISHES.				
A large kind of salmon	Tchavitche	Tchovnitche	Evstche	Tchivira
Red fish	Krafhnoiriha	Kehivifhe	Niovoai	Siitchine
The humpback	Gorbufhe	Koenautchi	Kalal	Siakipa
Turbot	Kambala	Sigifigh	Alpa	Tantaka
Lampreys	Minoghi	Kanaganfhe	Unknown	Unknown
Smelts	Korouchi	Innahu		
Herring	Selili	Neriner		
Skate	Skata	Kopafhu	Kammiahacke	Kapafhu
Cod fish	Freska	Battui	Unknown	Unknown
Whales	Kili	Dai	Junghi	Rika
BIRDS.				
Great sea cormorant	Bolofhoi tchaika	Atuma	Attume	Pengapiphe
Swan	Lebed	Matame	Kamtchan	
Geese	Goufsed	Kfude	Gecloaine	Kuntape
A drake	Celefna	Baine	Geftchogatche	Bakariku
Stone ducks	Kammenia utki	Nikinglike	Unknown	Vaiout
Widgeons	Gargari, Afhoai	Yovaiva		Cesse
Eagles	Orli	Selche	Tilmiti	Surgear
Hawkes	Saboli	Shifhi	Tilmitil	
Partridges	Kuropatki	Euihtchitche	Euette	Niepue
Crows	Voronni	Kaka	Tchautchavaola yelle	Pafkure
Magpies	Saroki	Kahitchertche	Unkitigin	Kakuk
Ravens	Voronitcherni	Hagulhak	Nimetta yelle	
Swallows	Lafiotchki	Kaiukutche	Kavalingek	Kuahan
Larks	Javoronki	Tchelaalai	Geatcheiere	Rikintchire
Cuckows	Kokafhke	Koakoutchitche	Kaikuke	Kahkuk
Snipes	Kuliki	Soakulutche	Tcheiss	Etchikumama

Of

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

136
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AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatka* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

Nothing plagues the

natives in their huts ſo much as the lice and fleas; the 136
women ſuffer moſt from the former, by wearing very long, 515
and ſometimes falſe hair. Mr. *Steller* was told, that near the 302
ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them.

It is remarkable that in *Kamtſchatka* there are neither frogs, 136
toads, nor ſerpents. Lizards, indeed, are numerous enough, which 825
the natives look upon as ſpies ſent from the infernal powers for 787
information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others.

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

361 different buildings; the entrance into the fort is by a ſmall
563 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about
45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

The

The upper fort of *Kamtſchatka* was the firſt built, and for ſome years reckoned the principal, as the chief commiſſary lived there. It ſtands upon the left bank of the *Kamtſchatka*, near the mouth of the little *Kaly*, about 69 verſts from the riſe of the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſcheretſkoi* fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper fort, and ſtands upon the ſame ſide of the river, about 30 verſts

 from

from its mouth. The fort is a parallelogram made with paliſades; its breadth is 40, and its length 42 fathoms. In the fort is a church dedicated to the Virgin *Mary*, the office and magazine for the taxes, ſtores, and the commiſſary's houſe. Theſe are all built of larch wood, and much neater than in any other fort. Without the fort are 39 private houſes, beſides the publick houſe and diſtillery. The male inhabitants are 92, of all ranks.

This fort, with regard to the neceſſaries of life, may be reckoned preferable to any other. Here the inhabitants catch plenty of fiſh, which they dry and ſalt in ſufficient quantities for proviſion through the whole year: here they have wood enough, not only for building their houſes, but alſo for building ſhips, to which the river ſerves as an harbour; and by its proximity to the ſea they boil ſo much train oil and ſalt as to ſupply the other forts. Game is here ſo plenty, that the pooreſt Coſſack ſeldom dines without a ſwan, gooſe, or duck; and through the whole winter, in the ſprings, they catch freſh fiſh. Wild berries of all ſorts are here in great abundance, which the inhabitants lay up in ſtore for the winter, and which next to fiſh is the greateſt part of their ſuſtenance; and the beſt *Kamtſchatka* ſables are caught near the river *Tegbil*. All the goods which they get from the *Koreki*, ſuch as deer-ſkins, and even the fleſh of the deer itſelf, are cheaper here than any where elſe: beſides, this is a moſt fruitful ſoil, where they may cultivate corn of all ſorts. The only inconvenience that they have is, that both *Ruſſian* and *Chineſe* goods are dearer here than at any other fort, which is owing to their land-carriage from the *Bolſcheretſkoi Oſtrog* hither, which coſts four rubles a pood.

The fourth fort was built upon the bay of *Awatſcha*, in the year 1740; and inhabitants were brought hither from the upper and lower *Kamtſchatka* forts. The houſes are tolerably good, particularly thoſe which were built for the people of the *Kamtſchatka*

000 consisted of myself, Mrs. Jochelson as assistant and physician to the party, and eleven laborers, of whom seven were Russians, three Kamchadals and one Japanese.

133 The Osernaya River, with its slanting bed, rocky banks, rapid falls and curves, forms a most difficult and dangerous route of travel. We had two boats and two canoes. One of the boats was for Mrs. Jochelson and myself; the other carried the tents, instruments, food and other supplies. The canoes served for reconnaissance and errands requiring despatch. It was very difficult to make progress on the turbulent river, particularly on the way up. Several times we had to disembark and carry our freight on our shoulders, while the boats were pulled by ropes through the rapids. (See Plate 5, figs. B, C.)

● 196 While there are no human habitations anywhere in the country, we were amazed to find well-beaten paths in the forests and on the mountains above the river, as if there were numerous human settlements. But realizing that these were roadways made by bears, we walked cautiously amid the dense vegetation with rifles ready for action. We did not see any bears while following these paths, but we heard the breaking and cracking of bushes and tree branches, and on the ground we found pieces of fresh salmon, the remnants of the bears' meals. The animals are very nervous and easily become alarmed. They have sufficient reason to be afraid of a man with a gun.

It is well known that at Lake Kuril and in its vicinity scores of bears are to be found. The abundance of fish and of many kinds of berries furnishes them ample food and favors their increase in number. The sparsity of human population is also favorable to the multiplication of the bears, although the few hunters of the coastal villages annually kill them by the hundreds.

133 After five days of painful effort we finally reached our destination. It was a windy day and our frail boats nearly capsized on the stormy lake, which is sur-
515 rounded by the peaks of extinct volcanoes and by steaming hot sulphurous springs,
757 the temperature of which reaches 100° C. (210° F.) and more. From our boat we observed steaming springs on the banks of the Osernaya when nearing the lake, but we had no time to stop to investigate them. We were told that the Kamchadal from Yavino and the Russians from Osernaya dig pits by the hot springs for bathing and curing different diseases. The temperature in these baths is reduced to 50° or 40° C.

136 From the head of the Osernaya River I directed my fleet to the Siwusk Cape (see map of Kuril Lake and Plate 5, fig. a). While excavating there we were entertained every day by the sight of bears fishing and gathering berries, particularly when we increased our field of observation by the use of opera glasses. The bears stood with their hind legs in the mountain rivers and creeks, and with their front paws managed to throw out on the banks the sea salmon, which in order to spawn ascend the rivulets that flow into the lake. The bears went after their prey and eating off the heads and spines, which are the most palatable parts of the fish, cast away the remainder. Their movements, turning, leaping and jumping, were so amusing that we could not restrain our laughter.

000 My laborers were anxious to hunt bears, but I could not allow them to go on such an undertaking as the time was short and a Government steamer was expected on a certain date at the mouth of the Osernaya River to take my party to Petropavlovsk. However, I once allowed two of them to go for a night hunt and they secured a little bear cub. They cooked and ate the meat.

On the morning of our contemplated departure from Lake Kuril, when all the specimens found in the excavations had been packed, the lids of the boxes nailed down and the boats loaded, I was tempted to linger just a little longer upon seeing two she-bears playing with their cubs on the other side of a pond in the rear of the promontory. I accordingly delayed my departure until the afternoon, and singling out two of the best marksmen from my party, and equipped with a stereoscopic camera and a motion-picture camera, I started in the direction of the bears. We had to undress in order to cross the Etamenk River in the rear of the promontory, and to carry on our heads the bundles of clothing, the rifles and the cameras, so that they might not get wet. We reached the other bank of the river, dressed ourselves, and tried to pass as noiselessly as possible through the little jungle which led up to the open meadow where the she-bears were playing with their cubs.

We stopped on the outskirts of the forest and put up the cinema and stereoscopic cameras. As the bears were still too far away, I told one of my two men to make a circuit about them and frighten them from the rear so that they might come nearer to us. Both cameras were in readiness to take pictures, when suddenly at a distance of about thirty yards appeared a young black bear quietly passing by. I quickly took a stereoscopic snapshot and was about to start with my cinema, but the bear became frightened by the clatter of the falling shutter of the photographic camera and, instead of running away, rushed in our direction. We had no choice but to aim at his head and fire as he neared the camera.

After ascertaining that the bear was dead, we looked around. None of the other bears were to be seen; they had been frightened by the shooting and had disappeared. As I could not remain on the lake any longer, I had to give up the idea of another attempt to approach bears with peaceful intent. The bear that was killed appeared to be not more than three or four years old. I took the skin and the meat of a hind leg for the laborers.

We returned to our camp late in the day and were compelled to spend one more night on the promontory. Next morning, our archæological mission fulfilled, we started our journey to the sea.

172 The proceedings and results of the excavations were as follows: I selected for digging the ancient village site on a cape or rather a small peninsula in the south-
133 western part of the lake. The Kamchadal call this cape Siwusk (see map of the
136 lake). The village was located on the rocky extremity of the cape and on its slope near the small inner lake. The extremity of the cape rises over the lake about 16 meters. The sides of the inner lake which join the cape with the mainland are about six feet wide. From both sides of the cape two small mountain rivers empty into the lake.

136 divert themſelves in this river, the ſurface of which is ſometimes covered by them; but it is difficult to approach near enough to ſhoot them. Game does not appear to be ſo common. But for the tracks of the bears, and the half-devoured fiſh, which continually preſented themſelves to our view, I ſhould have believed that they had impoſed upon me, or at leaſt that they had exaggerated, in telling me of the multitude of theſe animals with which the country abounds; we could perceive none; but we ſ w a great number of black eagles, and others that had white wings; magpies, ravens, ſome partridges, and an ermine walking by the ſide of the river.

000 Upon the approach of night, M. Kaſloff rightly judged that it would be more prudent to ſtop, than to continue our route, with the apprehenſion of encountering obſtacles ſimilar to what had already impeded our

[Bolchaia-reka--analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 sea wolves are also eaten; the fat of this fish
372 is very wholesome, and serves them beside for lamp oil.

136 Among the vegetables which are made
252 use of by the Kamtschadales, the principal
262 are *sarana* root, wild garlic, *slatkaïa-trava*, or sweet herb, and other plants and fruits nearly similar to what are found in Russia.

The *sarana* is known to botanists*. Its shape, its size, and its colour have been described at large in the third voyage of captain Cook. Its farinaceous root serves instead of bread †. It is dried before it is

* By the name of *lilium flore atro rubente*.

† The Cossacs use rye also, which makes a sort of black bread, like that of the Russian peasants. Government allows them a certain quantity of rye flour, but it is insufficient, and they are obliged to procure more at their own expence. Some of them lay it up in store in order to profit by its future sale.

used;

7:Lesseps T-3 (1787-88)1790 Kamchadal

136 uſed; but it is wholeſome and nouriſhing
252 in whatever mode it may be prepared.
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From the wild garlic* they make a harſh and fermented beverage, which has a very unpleaſant taſte; it is alſo uſed in various ſauces; the Kamtſchadales are very fond of it.

The ſlatkaïa-trava, or ſweet herb, is pleaſant enough when it is freſh. This plant† has alſo been minutely deſcribed by the Engliſh. It is highly eſteemed by the natives, particularly the ſpirit diſtilled from it. Soon after it is gathered, they ſlit it in two, and ſcrape out the pith with a muſcle-ſhell: they then dry it for winter, and

* It is called in Kamtſchatka, *tſcheremſcha*. Gmelin denominates it: *allium foliis radicalibus petiolatis, floribus umbellatis*. Vol. 1. p. 49.

† *Spondilium foliolis pinnatifidis*. See Linn. The juice of the rind of this plant is ſo acrid, that it is impoſſible to touch it without bliſtering the hand. In gathering it they take care to wear gloves.

when

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 ſure with which they count over the ſkins they obtain from them.

136 They chuſe for their chace the ſeaſons
·224 when the fur of the animal is in its greateſt perfection. Sables are hunted in the beginning of winter. Theſe animals live commonly in trees, and are called after their name; a part of the fur neareſt the ſkin being of the ſame colour as thoſe which they moſt frequent, as the birch, the fir, &c.

The moſt favourable ſeaſons for hunting foxes are autumn, winter, and ſpring. There are four different ſpecies. 1. The whitiſh red fox, which is leaſt eſteemed. 2. The red or bright red fox. 3. The fox called *ſévadouſchka*, the colour of which is a mixture of red, black, and grey. 4. The black fox, which is the ſcarceſt and moſt valuable: it is really of a deep and entire black, except that at the extremity of the fur upon the

7:Lesseps T-3 (1787-88)1790 Kamchadal

136 the back, which is the longeſt; a grey tint
224 is ſometimes perceptible. Some of this ſpecies are ſingularly valuable. There are two other ſpecies of the fox that may be added to theſe, though they are not regarded as ſuch in this country, the blue fox and the white fox. They are called in Ruſſia *galouboy peſſets*, and *beloy peſſets*; their fur is thicker than that of the reſt of the ſpecies. The foxes of the continent are in general more beautiful than thoſe caught in the different iſlands of the eaſt*, and produce an infinitely higher price.

Rein-deer are hunted in winter, and argali in autumn. Otters are extremely ſcarce in this country; but there is a great abundance of ermines, though, I know not for what reaſon, no pains are taken to catch

* The Aleutienne iſlands, Schoumagine iſlands, Fox iſlands, &c.

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ſoon puniſhed. After having travelled a conſiderable number of werſts upon the Kamtſchatka, which I had been delighted to find again, and the width of which in this place particularly ſtruck me, I was obliged to quit it and enter a ſort of ſtrait, where the ſnow, driven by the hurricanes, preſented an uneven and deceitful ſurface. It was impoſſible to ſee or avoid the rocks that ſurrounded me. I preſently heard a crack that told me my ſledge was damaged; it was in reality one of my ſkates broken in two. My guides aſſiſted me in adjuſting it in the beſt manner we could, and we had the good fortune to reach Ouchkoff without any other accident. It was midnight, and we travelled this day ſixty-ſix werſts. My firſt care was to refit my ſledge, which detained me till the next day.

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There are in this village one iſba, and eleven balagans; the number of inhabitants

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7: Lesseps T-3 (1787-88) 1790 Kamchadal

is reduced to five families, who are divided into three yourts. In the neighbourhood is a lake which abounds ſo much with fiſh, that all the villages round reſort to it for their winter ſtock. It is alſo a conſiderable reſource for the capital, which would otherwiſe be almoſt deſtitute of a proviſion of the firſt neceſſity throughout the peninſula.

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I left Ouchkoff early in the morning, and at noon had travelled forty-four werſts, partly upon the Kamtſchatka, and partly acroſs extenſive heaths. The firſt village I came to was Kreſtoff. It was a little larger than the preceding oſtrog, but ſimilar in other reſpects to what I had before ſeen. I only ſtayed to change my dogs. Hitherto I had purſued the road which M. Kaſloff was to take to get to Yelofki; but inſtead of proceeding like him to Khartchina, I directed my courſe, upon coming out of

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CHAPTER VI.

KAMSCHATKA (*continued*).

Abundance of bears—Ptarmigan—The Palæarctic region—Valley of the Bolcheresk—Arrive at the Kamschatka River—Dense growth of annuals—The sable—Methods of catching it—Puschina—Kamschatkan birds—Verglaski fishes the river—Kamschatkan salmon—The Tchervitchi—Krasna—Haiko—Garbusa—Kisutchi—Gultsi—Other salmon—Habits of bears when fishing—We arrive at Sherowmy.

136/137 We left Gunal on the morning of August 27th. Our two days' rest had done us all good, and Cook's disabled leg, which had at one time caused us some anxiety, was sufficiently well to risk going on. The injured member had not prevented his superintending the making of some most excellent bilberry jam. We had killed a fatted calf, of which, after much haggling, we had become the possessors for the sum of twelve roubles; and the carcase had been duly converted into veal and a good supply of stock. From our saddles hung several couple of mallard, and the larder on the whole was in as satisfactory a condition as it well could be. We had woke to a heavy mist, which rendered even near objects distinguishable with difficulty, but it lifted gradually under the rays of a bright sun, and before we were well off, and had turned to catch the last glimpse of the beautiful scenery around our late camp, the day had become all that the most *exigeant* of travellers could desire. Under hot suns like these the signs of autumn appear with wonderful rapidity, and we noticed that the tints were distinctly brighter than they had been but three days before.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 Before us lay the peaks of dazzling snow, and it seemed as though all Nature were hushed and worshipping at that throne of spotless purity.

Rest and purity then—the unattainable, in other words—in these lie the charm. The fairest tropic scene holds no deeper meanings such as these. Beauty of form there doubtless is, a far greater beauty perhaps than that of northern climes, but, after all, it is but soulless. The teeming life of a tropic forest, the marvellous wealth of vegetation, the reckless sacrifice of the weakest, produce

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WHISKERED PUFFIN. (*Lunda cirrhata.*)

upon the mind the same effect as do the streets of a crowded city. No grandeur of "calm decay," no pathos of the changing seasons is here. It is a fierce struggle for existence, fatal to any except the most purely material thought.

133 The shores of Avatcha Bay extend to the traveller a more
137 smiling welcome than the iron-bound coast outside. Here, the lower hills slope gently down to beaches dotted with driftwood, or, covered with birch and heather, steeply overhang the sea. Behind they are backed by higher ranges clothed with undergrowth, and rising to the height of fifteen hundred feet or more. To the north-west only is this basin-like appearance broken, where the small

133 Paraminka and Avatcha rivers have formed a delta with innumer-
137 able mouths. Low ground also intervenes between the three great volcanoes and the bay, but the height of the mountains annihilates
136 the distance. Hardly a sign of human habitation is to be seen, but the calm surface of the water is broken by quantities of water-fowl, whose nesting-places are the steep rocks at the entrance of the bay. Most noticeable among them are the Whiskered Puffins (*Lunda cirrhata*), and the still quainter-looking Tufted Auks. The little

TUFTED AUK. (*Simorhynchus cristatellus.*)

133 village of Petropaulovsky is invisible, hidden behind a steep promontory forming the western boundary of its harbour. What an admirable harbour it is from a sailor's point of view can best be seen by a glance at the engraving. From the end of this promontory a shoal extends nearly to the other shore, but leaves a channel deep enough for ships of the largest draught. Within this again a sand-spit,—so straight, so narrow, and so regular in form, that it is hard to believe that it does not owe its existence to the hand of man,—runs out from the opposite shore to within a stone's throw
000 of the promontory. We steam in steadily towards the land; to an

22: Guillemard T-2 (1882) 1886 Kamchadal

Every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

22: Guillemard T-2 (1882) 1886 Kamchadal

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the fact is taken into consideration, that for every inhabitant of the peninsula there are at least five or six of these animals, it will be understood that the effect produced is hardly inferior to that exhibited by the streets of Constantinople. "A dog's life" is a phrase which is here most appropriately realised. No comfortable homes are provided for them to enable them to withstand the rigours of the arctic climate, and the poor beast, except when actually at work, has in most cases to "find himself." Long experience, and the instinct transmitted to him by his ancestors, has, however, given him all the resources of an old campaigner. Stumbling at night about the uncertain paths of the settlements, the traveller is not unfrequently precipitated into the huge rabbit-burrows which the animal constructs to avoid the cutting winds. His coat, nearly as thick as that of a bear, is composed of fur rather than hair. As for his manners, they are, like those of the midshipman's savage, almost non-existent. He has thoroughly grasped the fact that self-preservation is the first law of Nature, and does not scruple to act upon it, in its widest meaning, upon every occasion. Wonderfully well-trained, cunning, and enduring, he is at the same time often obstinate and unmanageable to a degree, and is apparently indifferent to the kicks and blows so liberally showered upon him by his master. Excepting in settlements where neighbouring stretches of *tûndra* render the use of sledges possible in summer, he has a long holiday during that season. During this time he wanders over the country at will, sometimes returning at night to his burrow, at others being absent for days together. A good hunter and fisherman, he supports himself upon the game and salmon he catches, and it is but rarely that he deserts his master for good. But the inhabitants have to pay a good price for

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his services. Owing to his rapacity, it is impossible to keep sheep, goats, or any of the smaller domestic animals, and Kamschatka is one of the few countries in the world in which fowls are unknown.[1]

[1] In Petropaulovsky this loss is partially made up for by large quantities of sea-birds' eggs brought from Okhotsk, and the islands at the mouth of Avatcha Bay.

22: Guillemard T-2 (1882) 1886 Kamchadal

231 *Rien n'est sacré pour un sapeur.* Raw hides, boots, and even babies,
136 it is said, occasionally vary his diet!

To our ship's crew Petropaulovsky appeared little less than a paradise. The bright sunny weather and clear cold nights were a pleasant change after the heat of the tropics, and the forecastle mess was furnished with many unaccustomed delicacies. The
136 harbour and rivers teemed with fish; periwinkles *à discretion* were
137 to be had for the picking, and milk and bilberries were abundant. The whiting and herrings were, however, left in comparative peace, owing to the ease with which salmon were to be obtained at the mouths of the Avatcha and Paraminka rivers. On one occasion no less than three hundred of these fish were obtained at one haul of the seine, and the crew occupied themselves in salting, smoking,
000 and otherwise preserving the spoil. Jack was in his element, and doubtless would not have objected to passing the rest of his life in such a fascinating spot. Our shooting excursions to various parts of the bay were much enjoyed by the boats' crews, and the forward part of the ship began ere long to be ornamented with bearskins that the men had obtained by purchase or barter from the natives. Meanwhile we had been making arrangements with the Ispravnik, and the individual I have before mentioned under the title of the King of Kamschatka, for the ponies that were necessary for the first part of our journey; but, as there was some delay in getting
133 together the requisite number, a party of us started to visit the hot springs of Kluchi,[1] which lie some few miles from the shore on the other side of the bay. Excepting during strong south-easterly winds, which send a somewhat heavy swell into the entrance, the passage across is generally pleasant enough even in small boats. Though blocked with ice in the winter, the bay is, we understood, but rarely frozen right across, although the harbour of Petropaulovsky is, of course, closed for some months. Landing in a bay north-west of the entrance to Tareinska Harbour, we passed through an extensive birch-forest, and emerged at length on the shores of a

[1] Kluchi, I believe, is the Russian word for springs.

136 Avatcha River, and forty versts from Petropaulovsky. We passed
137 through the same monotonous forests of birch as before, which, like
487 those of other northern countries, seemed singularly devoid of animal life. An occasional coal tit, which from its note and habits appeared identical with the tame little freebooter of our own gardens, or the tapping of a woodpecker,[1] alone broke the almost death-like stillness which reigned around. We had struck a well-marked trail, and progressed in Indian file, the packhorses (tied in fours, each to the tail of the one in front) leading the way, and relieving the monotony by an occasional breakdown or a stampede.
231 Almost all these ponies are strong and well shaped, but from the ill-treatment they receive at the hands of their masters, have learned to bite, kick, and shy on all occasions, together with other accomplishments of like nature which were somewhat apt to dis-
000 turb our equilibrium. There was but one saddle among us, and the "Kamschatkan Peats," as we named the combination of pillow and pack-saddle which we used as a substitute, though comfortable enough when we ambled along quietly, were apt to become slightly insecure when, as a naval member of our party expressed it, we "made bad weather."

The path between Stari-ostrog and Petropaulovsky appears to be tolerably well-travelled, to judge from the frequency with which we came across the marks of old camping-grounds, but we met with no one on our way. It was afternoon when we reached the river, and crossing a small affluent, found ourselves opposite the village. We had ridden on ahead, and were hailing the natives for canoes in which to cross, when a tremendous clattering in our rear caused us to turn, and we beheld the cook's horse advancing in full stampede, but minus his rider. Beneath his belly a large canteen swung violently from side to side, half-open, and discharging a shower of tin cups, knives, forks, plates, tea and coffee kettles, and other articles of like nature in all directions. We retraced our steps sadly, picking up such articles as we could find, but

[1] *Picus tridactylus*, considered as a distinct species (*P. albidior*) by Dr. Stejneger.

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared to be teeming with salmon. Stari-ostrog, situated on the right
251 bank, consists of ten huts and a large number of fish-drying sheds.
262 The long Kamschatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 361 We reached Narchiki early in the afternoon, and were greeted by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 136 226 Narchiki is placed on a little branch of the Avatcha River, which is here not more than eighteen inches deep. Standing upon its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our 136 horses nearly stepped upon them. Their back fins were visible as 226 far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

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136/226 could have pulled these latter out of the water with the gaff until we were tired.

While we were engaged in procuring our supper by this simple method, a native came down and watched our proceedings. Taking a spear he went a little way up stream, and soon returned with half a dozen fish which were a great improvement upon our own selection,—for I can apply no better term to it. They were of three species:—one a long charr-like fish, of a brilliant salmon-colour beneath, but with the back dark green, and with a most peculiar lower jaw. This closes into a sort of groove or socket in front of the upper jaw, producing a very extraordinary under-hung appearance. Its native name is Gultsi.[1] The other fish were a grayling (*Thymallus*) somewhat like our own, but not so deep; and a species of trout with obsolete spots.

The vast quantities of salmon which fill the rivers of Kamschatka in the manner I have described cease in course of time to astonish the traveller, who goes down to hook his supper out of the stream as naturally as he gathers the firewood to boil his kettle. But to a new-comer the sight is an astounding one. The millions of fish that are caught, and form the food throughout the year of almost every living creature in the country, are, however, as nothing compared with the countless myriads that perish naturally. I had at first supposed that the rotting fish that lined the banks, and here and there lay piled in little heaps together, were the victims of some unexpected and fatal epidemic. But I soon learnt that there was nothing unusual in it, and that it was an annual phenomenon of as constant occurrence as the breaking up of the ice.

000 We entered one of the huts in order to eat our lunch and rest the horses before proceeding on our journey. It was combined with the stable, through which one had to pass before entering the only habitable room. This was tolerably clean, and boasted of a couple of chairs and a table; but we had already got beyond the region of glass, and the windows were made of strips of bear-gut

[1] *Salmo callaris*, Pall.

000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

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322 ornamented with stamped designs, and are occasionally painted, or
531 rather dyed, with blue and white; while the oval shape so commonly seen in Scandinavia is not infrequent. To the European traveller the tree is equally useful. Cups and other articles can be made with the greatest readiness; fires can be lighted in the wettest weather with the thin inflammable bark, and the inner layers of the latter form excellent writing-paper, the characters on which no quantity of rain will injure or render illegible.

133 The scenery some miles north of Narchiki begins to alter in
136 character, an alteration that is distinctly for the better. The monotony of the birch-forests is relieved from time to time by openings where the dense undergrowth is supplanted by little rocky knolls covered with bright mosses. The ground becomes more broken and the open spaces larger, and before long the country approximates closely in character to that which, in Scandinavia, would be designated the lower fjells. We had hitherto shot but little game, but here ptarmigan were abundant,[1] and we were able with ease to secure as many as were necessary for the table. Farther on, we came to a small stream, which was, most probably, an affluent of the Great Bolcheresk River, which debouches into the Okhotsk Sea on the western coast of the peninsula. It was crowded with dead and dying fish; and the remnants of some recently devoured ones upon the bank, together with fresh spoor of bear around them, told us that, in all probability, Bruin was not far off.

I had never before seen the tracks of this animal in such abundance, but farther north it was common enough to see the river-banks as much trampled as if a herd of cattle had been driven down to water. The bears at this season of the year live entirely upon salmon. Later, when this diet fails them, they take to berries, upon which they live until the time of hybernation, which is generally

[1] Probably a sub-species of, or perhaps identical with, the Dal-ryper or Willow Grouse of Scandinavia (*Lagopus albus*). I unfortunately omitted to preserve specimens of this bird until it was too late, and we did not shoot any after we had once begun the river journey.

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136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 Our road, some time after leaving Narchiki, had led to the
137 west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature
132 of northern landscapes, we put up several coveys of ptarmigan;
136 and on the outskirts of a small wood we obtained our first
231 Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

132 The sun heat was, indeed, so great that we gladly took refuge in the tent, and at noon the mercury stood at nearly 80° Fahr. in the shade. These hot days are not unusual at the end of August, and constitute a sort of Indian summer, which, as in Lapland, is but the immediate precursor of an autumn so short as hardly to be dignified by the name of a season. At sunset the temperature fell rapidly, and at night it was so cold that we were glad of four blankets, the thermometer being at or about freezing point. A range of something like fifty degrees in a single day is not often seen, but weather of an almost exactly similar kind is met with during winter on the high table-lands of Southern Africa. The Kamschatkan autumn cannot always be relied on, for, from what we could gather from the natives, it is not unfrequently attended with a very heavy rainfall, and occasionally with much wind.

136 We had hoped to find Bighorn in the mountains in the neighbourhood, but, greatly to our disappointment, the people of the village told us that these magnificent sheep never come down to the lower spurs of the range before winter, and that it was useless to go after them. This was the second time we had to give up the idea of hunting them. We were, however, more fortunate with the bears, and succeeded in bringing one to bag upon the first day after our arrival.

[of Gunal--Analyst]

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000 and notices a familiar-looking wagtail running along the well-trodden paths of the settlement. Overhead, maybe, hovers some bird of prey, which he may recognise as an Osprey or a Hobby; and as he shoots his first grouse, or notes a woodpecker tapping at a tree hard by, he identifies them, or at least thinks he identifies them, with like species he has met with in his own or some Norwegian wood.

In the majority of cases he is right. In others he is, at all events, not far wrong. For, in consequence of the similarity of the fauna which extends over the whole of Europe and Northern Asia, zoologists have been led to group these countries together under the name of the Palæarctic Region, and the species which are common alike to Great Britain and Eastern Siberia are numerous.

136 Kamschatka abounds with birds of wide range with which the European traveller is quite familiar, but its peninsular position has at the same time had a certain influence towards the creation of representative forms, among which those of the Great and Lesser Spotted Woodpecker,[1] the Capercailzie, and the Marsh Tit may especially be instanced. In all these the differences consist for the most part in the greater predominance of white in the plumage, and this tendency to albidism is noticeable, as I have already mentioned, in other animals besides the birds; the dogs and horses likewise showing it in a marked degree.

000 We wasted some time of the morning of August 28th in tracking a large bear that Afanasi had wounded on the previous evening.

[1] *Picus pipra*, the eastern form of our *P. minor*, is found over the greater part of Siberia, and even in Japan. Kamschatkan individuals are noticeable as exhibiting the characteristics of the species in a more marked degree than those of the adjoining continent. In the same way the *P. major* of the peninsula differs from that of Europe, and has recently been raised to specific rank by Dr. Stejneger as *Dendrocopos purus*. It differs "in having the breast and upper abdomen very pure white, the white of the lateral rectrices without, or almost without, dark markings, and possessing a white spot on the outer web of the longest primaries near the tip." The specimens that we obtained in our journey through the country bear out this description except in the last-named particular. Both these woodpeckers were comparatively common in the country round Gunal.

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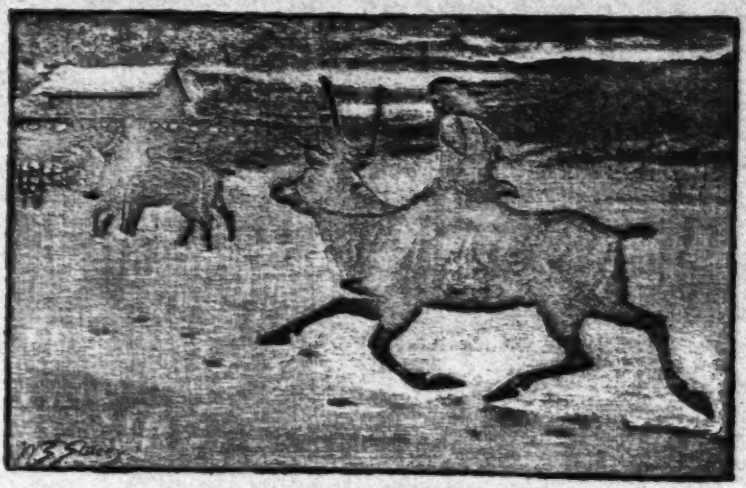
000 He had been hard hit, and marks of blood were plentifully visible as we took up the spoor. The vegetation was, however, so thick, and everywhere so overrun with the trail of these animals, that before long we had to give up the search, in spite of the aid of
133 Verglaski. We therefore returned, and striking camp, proceeded
136 up the valley of the Bolcheresk River, as on the previous day. The river here runs due south through a flat plain covered with yellow grass and about three or four miles in width. It is hemmed



REINDEER RIDING, KAMSCHATKA RIVER.

in by mountains which are at first of no great height, but as the head of the valley is approached the scenery becomes finer. We rode towards it under heavy rain, but before long the weather cleared, and disclosed to view a gloomy gorge on our right, about eight miles distant, from which the river evidently debouched. At the same time another valley became apparent, joining in from a north-north-westerly direction, and the stream which flowed through it appeared to have the same source as the Bolcheresk, or at least to rise at no great distance from it. We had got at last to the head waters of the Kamschatka River!

000 having failed, kicked one of the packhorses violently in the belly while unloading it. The effect was excellent. The poor animal, who, like the Pope's mule in Daudet's charming little story, had many an old score to pay off, turned round and bit his aggressor so successfully in the face as to leave him with a portion of his cheek hanging down. Here we interfered to prevent reprisals, and while the conqueror was led off to a patch of the most succulent-looking grass we could find, Vodki retired to his tent to nurse his wound for the next two days.

133/137 Accustomed as we had become during the earlier part of our journey to the wonderfully dense growth of the annual herbage, especially in the birch-forests and in the vicinity of the rivers, I do not think we had ever seen it in more rank luxuriance than we found it here. Our camp was pitched on a little eminence two or three hundred yards from the river, but the latter would have been almost unapproachable had it not been for the numerous bear-tracks that led in every direction through the forest of grass. As it was, the vegetation rose three or four feet above our heads, and was in places so thick that we could never be sure that our next footstep would not precipitate us into one of the hidden streams with which 000 the marshy ground abounded. In such ground shooting is almost impossible, and the only plan is to lie up in concealment on the banks of the river, on the chance of a bear coming out in the neighbourhood to fish.

We spent the remaining two or three hours of daylight in this monotonous and chilling amusement, and rose wet and stiff with cold without any success having attended us. The bears had in all probability deserted this part for some other place where fish were more numerous, and the only recent spoor we saw was that of an otter, an animal that is apparently far from common in the peninsula.

136 The following morning, since there appeared to be no fish in the river, we put our rods together and tried a fly in Kamschatkan waters for the first time. Paradoxical as it may seem, a river of

136 this kind presents the only condition under which this sport is feasible, at least at this season. With the river choked with foul and dying fish, where every cast would foul-hook a fish that would be uneatable on landing, it is of course an impossibility. Here the stream was free from salmon, but though we hoped to obtain some trout or grayling, it seemed to be equally devoid of these also; and having spent an hour or two without getting a rise, we returned to camp. We found that one of our party who had been out after capercailzie had been fortunate enough to shoot a sable. The animal had been found by Verglaski, who had chased and treed it, and in spite of its not being, from a hunter's point of view, in full condition, it had been duly added to the bag. Our hunters told us that it was extremely rare to see sable at this time of year. The winter coat had begun to grow, and was, indeed, of tolerable
136 length and quite fast. In spring, although the winter fur may be
224 still on, the pelts are said to be quite useless, as the hair drops out even after the skin has been prepared. The animal measured twenty-seven inches in extreme length; the tail, which was not furnished with the thick brush so characteristic of the winter skins, seven inches; and the value of skin in the Petropaulovsky market was estimated by Afanasi at four roubles. The price given for winter sables is, as I have already stated, sixteen roubles.

The sable is always skinned from the tail—bag-shaped—and while performing this operation in the approved fashion of the country, we listened to a sermon on sables and sable-hunting from Afanasi. They are, he told us, for the most part of nocturnal habits, and, though they occasionally feed by day, generally spend that period of the twenty-four hours in holes at the roots, or in the trunks of trees. They dislike the presence of man, and are rarely to be found in the neighbourhood of the villages; their favourite resort being the depths of the forests least frequented by the natives. It is considered that the most inaccessible and least known parts of the country are the best hunting-grounds. They live on hares, birds of all kinds, and in short, almost any living

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thing they can kill, but they are also said to eat berries, and even fish. There are, indeed, but few animals, apparently, which do not live on salmon in Kamschatka. They have only one litter during the year, generally in the month of April, and bring forth four or five young at a birth in a nest in the holes of trees. When the hunter is bitten for the first time by one of these animals, the bite is almost invariably followed by severe illness; but on subsequent occasions no ill effects, with the exception possibly of slight inflammation of the wound, are produced.

There are various methods employed in catching sables, but a less number are trapped now than used formerly to be the case. Dogs are almost invariably employed, to run them down in the deep snow or to tree them; and they are also smelt out by these trained animals in their holes at the roots of trees. The great object is to tree the sable if possible. The hunter then surrounds the base of the tree with nets, and either shakes down his quarry or knocks it off the boughs with sticks. If it does not fall into the net it is run down by the dogs, or compelled again to take refuge in a tree. Should the tree be too high for this method to be successful, it is cut down, or the sable is shot; but the hunters generally avoid the use of the gun if possible, as it is apt to spoil the skin.

The hunters usually start on their winter's expedition towards the end of September, if their destination be a distant one. If it be in better known country and closer at hand they wait until the first snows have fallen, and do not leave before the middle of November. They train dogs especially for the purpose, and a good sable dog is one of the most valuable of a Kamschatkan hunter's possessions. A catch of twenty sables in a season is considered exceptionally good. Jacof Ivanovitch and one of our horse-boys, in company with two other hunters, had on the preceding winter tried some new ground on the shores of the Kronotsky Lake, and had been particularly successful. Jacof had only succeeded in killing fifteen, but our horse-boy had bagged no less than forty; and the total

136 the south. Corvine birds are abundant wherever there are fish, and large flocks of the common crow (*C. corone*) are always to be found perched on the trees in the vicinity of the rivers, or pecking at the piles of dead fish rotting on the banks. The familiar chatter of a magpie, which differs but slightly from our own bird, is as common a sound in Kamschatka as it is in England, and the rigours of an Arctic winter appear to have had no sobering effect upon his character.[1] Ravens too are here, and by the side of the stream runs the Wood Sandpiper (*T. glareola*), almost the only bird of this genus that we noticed on our journey. The surface of the water is dotted with various species of duck, of which mallard and teal[2] are perhaps the commonest. Like everything else, they too seem to regard the dead salmon as a source of food, for in many of those we shot the crop was full of maggots.

We halted for our mid-day meal on the banks of a little stream a few versts beyond Puschina, and while engaged in discussing our wonted dish of cold grouse a fine eagle flew over us, which we were fortunate enough to secure. It was only winged by the shot, and made such a determined resistance to our efforts to secure it, that we eventually had to give it the contents of another barrel. It proved to be a female Erne (*Haliaëtus albicilla*) in not quite mature plumage, measuring six feet eight inches across the wings. The crop contained the remains of salmon, and the bird smelt so atrociously from its prolonged fish diet, and was so fat, that the operation of skinning it was anything but a pleasant one. It was the first example we had obtained, but we afterwards found the species common towards the lower part of the Kamschatka River. The magnificent Pallas's Eagle (*Thalassaëtus pelagicus*) we did not meet with until we had reached the neighbourhood of the great volcanoes.

000 While we ate our meal we watched Verglaski, slow-moving

[1] This species is another instance of the tendency to white in the birds of this region. It has the extension of that colour on the wings characteristic of the Central Asian Magpie (*P. leucoptera*, Gould), but even more developed.

[2] The Teal were of two species—*Q. crecca*, and another, of which we did not preserve any specimens. It is, I believe, *Q. falcata* of Pallas.

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000 and solemn as ever, occupying himself in securing his own dinner. He waded leisurely into the stream, just as a bear would, and stood placidly watching the water for his prey. He was evidently an old hand at the business, and would have sniffed disdainfully at any ordinary kelt. No miserable half-dead Garbusa, such as sledge-dogs are fed on, would have contented him. As a bear-dog, he felt such diet to be beneath him, and, like a true fisherman, looked out for the clean fish. There were not many of them, although the half-rotten corpses on the bank spoke of the numbers of salmon that had at an earlier part of the year frequented the stream. I cannot hope to convey to my readers any idea of the enormous multitudes that yearly visit the rivers of Kamschatka. Krasheninikov, writing more than one hundred years ago, says, "The fish come from the sea in such numbers that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink; and at this time the bears and dogs catch more fish with their paws than people do at other places with their nets."[1] We had no opportunity of seeing the advent of the salmon, owing to the lateness of our visit; and the death of the fish is of course not due to the subsidence of the water, as he seems to imply. But that the rest of the statement is devoid of exaggeration we had abundant opportunities of proving. None of us, unfortunately, were ichthyologists, and the rapidity with which we were obliged to travel through the country, combined with difficulties of transport and the want of spirit and receptacles, prevented our preserving specimens. In the following paragraphs I have embodied my notes upon the salmon of Kamschatka with the statements we obtained from our hunters.

136 Every year the various kinds of salmon arrive at the mouths of the Kamschatkan rivers with surprising regularity. The date of the advent of these different species extends from May to mid-

[1] "The History of Kamschatka," translated by James Grieve, M.D., Gloucester, 1764, p. 143.

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136 August; but each has its own time of arrival, which, from its constancy, appears to be more or less independent of seasonal influences. A few fish apparently remain at or about the river mouths during the summer, and eventually return to the sea, but these are so few as to be scarcely worthy of mention. The vast majority—practically all, in fact—ascend the streams to spawn, and, having once done so, die. In the case of some species every fish appears to perish; in others, to which I shall refer, a few get back to the sea.

The kelts of these salmon exhibit, though in a far more intensified degree, the changes that are noticeable in our own salmon after spawning. The jaws are prolonged and hooked, and the teeth much developed. The back becomes somewhat humped—in one species enormously so—and the skin of that region so hypertrophied and spongy as to conceal the scales. Simultaneously the colour of the body surface changes, becoming livid or dusky, and blotched with red patches, or even entirely red. The flesh gets paler in colour and tasteless, and the whole aspect of the fish denotes its unfitness for food. As they ascend the river the salmon keep close together in large shoals, each fish keeping to the shoal of its own species and not mingling with others. Later in the year, after spawning-time, they of course become indiscriminately mixed.

136 During our visit to, and journey through the country, we met
226 with at least six different species of the Salmonidæ in abundance.
825 That there were others I am quite sure, but in the following list I have limited myself to noticing those only about which we personally obtained information:—

1. *Oncorhynchus orientalis* (Pall.)—Known to the Kamschatkans as the Tchervitchi, this fish is the king of the Salmonidæ both as regards size and flavour. On first arrival the Tchervitchi is silvery, the back and upper surface dark, and marked with dark spots, which also extend on to the dorsal fin and tail. The fish may have a length of four feet or more, and are rather broad: their extreme

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weight was given by Afanasi as "over two poods," which would be 72 lbs. We did not see any fish of this size, but a salmon, most probably of this species, was caught by the *Dido's* men in 1855, the weight of which is given by Tronson as 76 lbs. There is no doubt that they commonly run to as much as fifty or sixty pounds. The Tchervitchi is proper to the Kamschatka and Okhotak Seas, apparently not being found elsewhere. According to Steller, it only frequents the larger rivers, and does not exist to the north of the 56th parallel. He gives the date of its arrival as April 20th for the Kamschatka River, May 10th for the Bolchaia-reka, and June for the rivers in Avatcha Bay. According to Afanasi, it comes up the Kamschatka River "early in May," and gets out of season in July. It certainly appears, as far as we could learn from the natives, to wait for some days at the mouths of the rivers before ascending them, which it does in shoals so large that, as Pallas tells us,[1] a little wave of water is driven up in front of them.

We did not meet with the Tchervitchi until we got to the Kamschatka River in early September. The inhabitants had then long since ceased catching them, and very few remained in the river. The balagans and drying sheds were, however, full of them, and many seemed not to have been in quite clean condition at the time of catching. As a kelt, the fish becomes marked with red on the sides, producing a streaked appearance, and the rostrum becomes hooked, especially in the male, though apparently not nearly to the same extent as in the Garbusa and other species. From the time of entering the river the Tchervitchi is said by Pallas never to feed. We made no inquiries of the people as to this point, but they told us that a certain, though very small proportion of this species do not die, but manage eventually to regain the sea. The flesh is of a rather pale red in colour, and is esteemed by the natives above that of any other fish.

2. *Oncorhynchus lycaodon* (Pall.)—This salmon is known to

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 368.

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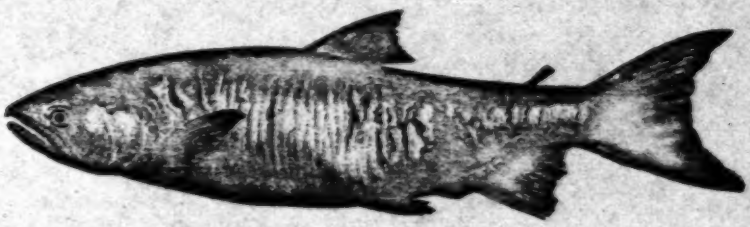
Kamschatkans[1] as the Krasnaya riba or red fish, but the name is invariably shortened to Krasna. In shape and general appearance it resembles our own salmon. On its first appearance in the rivers it is silvery, the belly white, the back dark with a bluish shade and almost without spots. In length it reaches three feet or more, and large examples would, I should think, scale over thirty pounds. It is found in the Okhotsk and Kamschatkan seas, and extends across to the American coast.[2] In the peninsula it seems to frequent large and small rivers alike, ascending the streams about the end of May or beginning of June, later than the Tchervitchi, but before



KELT OF HAIKO. (*Oncorhynchus lagocephalus.*)

the Haiko and Garbusa. Towards the end of August the Krasna is completely out of condition. It becomes a bright red all over like a gold fish, and both jaws get prolonged and hooked, while at the same time the teeth are wonderfully enlarged. None of the fish ever reach the sea after spawning—at least so we were informed by the natives;—and as this species is one of the most plentiful of all the Kamschatkan salmon, their bodies strew the banks in nearly as great numbers as the Garbusa.

3. *Oncorhynchus lagocephalus* (Pall.)—The trivial name of this fish is given by Steller[3] as Kaiko, but we found it invariably known as the Haiko. It is not unlike the preceding species (*O. lycaodon*),

[1] I have here and elsewhere used this term comprehensively as "an inhabitant of Kamschatka." It should not be confounded with Kamschatdale—the name applied to one of the original races inhabiting the peninsula

[2] Steller, "Beschreibung von dem Lande Kamtschatka."

[3] *Op. cit.* p. 157.

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the back being dark greenish, the sides silvery, and the belly white, but it differs in the greater bluntness of the rostrum and the pale colour of the flesh. It appears, as a rule, to run smaller than the Krasna: its area of distribution is said to be similar. It arrives at the mouth of the Kamschatkan rivers some little time after the Krasna and Tchervitchi, but its advent coincides more or less with the Garbusa or Hump-backed Salmon. About mid-July[1] this species ascends the streams, and is caught in great numbers. Later, the kelts show much the same changes as those of the Krasna, the jaws becoming much hooked; but they never acquire the deep and

KELT OF GARBUSA. (*Oncorhynchus proteus.*)

generally-diffused red of the latter species, that colour being usually confined to small patches on the belly and under surface. A species of bread is said by Kittlitz and others to be made of the Haiko, but we did not see it.

4. *Oncorhynchus proteus* (Pall.) is known to the inhabitants of the country as the Garbusa or Hump-back. On arrival from the sea this fish is said to be without any trace of the extraordinary development of the back from which it takes its name. It is without spots, except upon the tail—which is deeply forked—and is very silvery. It is said to frequent the rivers of the Okhotsk Sea and those of some of the Aleutian Islands, as well as Kamschatka. Roughly speaking, its length is from eighteen to twenty-four inches,

[1] I have also got "mid-June" in my notes, but I think the date given above is probably the correct one.

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and its weight seldom above fifteen pounds. As a rule it is considerably less.

The Garbusa swims up the rivers in company with the Haiko, and is the most abundant of all the Salmonidæ in Kamschatka. According to Pallas, the hump begins to appear even before the fish has spawned, and is generally supposed by the natives to result from the efforts made in ascending the stream! Its enormous development in the kelts can best be realised by reference to the annexed illustration. Both jaws become hooked at the same time, more so, perhaps, than in any other species, and in consequence, in an old kipper the mouth does not nearly close. Until the death of the fish the gibbosity increases, and the colour of the body-surface becomes more and more livid and brown, the sides and under part being irregularly blotched with blood-red. The vast majority of this species die in the month of August, and though some few live till the middle of September, the natives told us that none return to the sea. The flavour of the flesh is said to be very good when the fish first come up the river, but the Garbusa is looked upon almost as the dogs' private property, and is not much eaten by the natives. In the balagans and drying sheds it invariably occupies the lowest tier of all. The female fish is described by Pallas as much smaller than the male, and very much less numerous; the hump does not become so largely developed and the mandibular hooks are absent or slight. We did not, however, meet with many individuals agreeing with this description.

5. *Oncorhynchus sanguinolentus* (Pall.) is the Kisutchi of the Kamschatkans. The clean fish is silvery, and devoid of red colouration, despite its specific name. The dark greenish-brown back is marked with rather large black spots, and the snout is blunt, becoming afterwards developed in a most peculiar manner. Pallas says that the largest measure three feet and weigh from ten to twelve pounds,[1] but it is evident that a fish of this length would weigh considerably more. Most of those that we saw towards the

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 379.

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lower part of the Kamschatka averaged, I should think, about twelve or fifteen pounds; the extreme weights, at a rough guess, being eight and twenty-five pounds.

The Kisutchi is the last of all the salmon to ascend the rivers. It arrives about the 10th or 12th of August, and in consequence is in good condition when most of the other species are uneatable. In the middle of September we found the majority of them clean fish, and it is not till the following month that they usually acquire the blood-stained tinge of the under surface, and the extraordinary snout to which I have just alluded. The latter presents a smoothly rounded protrusion about as large as a sixpence, over-hanging the lower jaw, and giving the fish a very comical expression. We learnt from our two hunters that the Kisutchi were caught until November, and Krasheninikov tells us[1] that they are found "during the whole winter in those springs that run into the Kamschatka from the south," which is possibly due to the fact that the water of some of these streams is warm. It appears to be a generally-distributed species, occurring in all the rivers of the peninsula. The flesh is very pale, almost white.

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6. *Salmo callaris* (Pall.) is the Goletz or Gultsi of the natives. Krasheninikov says[2] that "the largest fish of this species, which lives sometimes five or six years, comes from the sea into the River Kamschatka, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almost as big as the *Chavitsi* (Tchervitchi), though it seldom weighs more than twenty pounds. They are found likewise very large in the Bistroy River; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour,[3] have large teeth, and the lower jaw is crooked with a knob: it seems indeed of a different species. Those of three years old, which have been one year out of the sea, have a long head, are of a silver colour, with small scales, and

[1] "The History of Kamschatka," p. 148.

[2] *Op. cit.* p. 149.

[3] Steller also says, "auf dem Bauch und Flossen Zinnober-roth."

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small red spots; and such as have been two years out of the sea are round and longish, with small heads; and their flesh, which is reddish white, is hard and well tasted. With regard to their size, the first year they are long and small; the second they grow more in breadth than in length; the third the head grows considerably; and the fourth, fifth, and sixth years their breadth and thickness increases greatly: in the fourth year also the lower part to the snout becomes hooked."

Pallas adds that "these fish enter the rivers from the Eastern ocean in great numbers . . . in order to hybernate, being still without spots. They are said to remain torpid during the winter in the

GULTSH (*Salmo callaria.*)

depths of rivers, in shoals of thousands, until at the return of spring they seek the sea again, from about the 10th to the 20th of May. They surmount cataracts of whatever height by leaping, and in the same manner escape from nets one fathom deep. They force their way into the Kuril Lake near the River Kamschatka,[1] notwithstanding a very high cataract, and hybernate in it in large numbers. Many remain for a long time in the rivers and lakes, but the greater number return in spring to the sea. When they come up from the sea they are without the red tint and spots, and shine with a silvery lustre; during the ascent they become gradually spotted with red, while they acquire a more or less red tint beneath the belly and on the fins, according to the comparative rapidity of the river currents."

Both the above accounts are very difficult to reconcile with that

[1] It is difficult to understand what lake is here meant. The Kuril Lake is at least 170 miles distant from the nearest point of the Kamschatka River.

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114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

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000 and whether boiled or fried in steaks, the fish has a delicacy of flavour that is rarely met with at a civilised dinner-table. But, of all methods of cooking it, one is pre-eminent in its excellence. Cleaned, split, and gutted, the salmon, which should be a small one, is impaled upon a Y-shaped forked stick, and placed half over the fire, so that it may be exposed to the occasional action of both smoke and flame. A certain amount of attention is necessary to see that it does not get too much of either, and care should be taken to turn it tolerably frequently. But if properly done—and, those who have tried it will bear me out—the dish is one fit for the gods, and loses nothing from the simplicity of the necessary apparatus.

We broke camp at noon on the following day, being within easy distance of Sherowmy, where we calculated on beginning our river journey. A heavy shower fell as we were striking the tents, wetting much of our baggage and our ornithological specimens before we could get them under cover, but the weather soon cleared, and we continued our march. Our long cavalcade proceeded in Indian file over the desolate and monotonous stretches of bilberry-covered open and stunted birch-thicket,—a type of country which, however exhilarating beneath a bright sun, is depressing to a degree under grey skies and driving rain. The wind held steadily from the west, however, and having made sure of the direction in which Sherowmy lay, we left the party, and turning our horses towards the river, devoted the remainder of the day to a search for bears. We had no sooner taken up our positions by the river-side than the wind shifted, fell light, and then shifted again, and all
114 hopes of getting a shot vanished. Of there being bears in the
136 vicinity we had abundant evidence, for the banks of the river were trampled in all directions with their fresh footmarks, among which it was easy to recognise those of an old animal of great size.[1] The

[1] Some of these Kamschatkan bears are enormous. One skin in my possession measures eight feet three inches in length, in spite of the greater part of the head being wanting.

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114 remains of many half-eaten fish lay on the banks. The bears are
136 said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 Sherowmy, or Sherowm,—for the Kamschatkans are fond of
144 clipping the exuberance of their words, and turn Kamakoffskaya
157 into Kamaki,—is a pretty little village of nine houses and forty-
161 three inhabitants, situated on a branch of the Kamschatka River
177 close to its junction with the latter. To the south lie a few acres
361 of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

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322 from the trunk of the *topoyina* or poplar-tree. They are generally
501 about twenty-five or thirty feet long, by two feet in beam and depth, and are made to a great extent by burning out the interior of the tree-trunk selected, the finishing only being done by means of axes. We were able to procure five of these boats, and by their aid constructed two rafts in the following manner. We lashed three together side by side, with an interval of about one foot between each, taking care to place the weakest in the middle, and on this foundation placed a platform of poles and axe-hewn planks amidships, for a length of twelve or fourteen feet. Over this platform we constructed a rough shelter-hut, with a birch-bark roof sloping away behind, and the back and sides composed of water-proof sheets which could easily be furled or removed when necessary. The other raft, which carried Louis, Cook, and our two hunters, was made in the same way, but without the hut; and owing to its having but two canoes as a foundation, was laden fully up to where its Plimsoll-mark should have been. Our natives sat at the head and stern of each canoe, wielding paddles with a spade-like handle. They were also provided with poles, the use of which, wherever the river was sufficiently shallow, they seemed greatly to prefer. Shortly before noon our preparations were completed, our men waved their adieux to the remaining three-fourths of the inhabitants of Sherowmy, and pushing out into mid-stream, we began our descent of the river.

PADDLE.

133 Immediately below the settlement the branches of the Kamschatka reunite to form a stream nearly as wide as the Thames at
136 Hampton Court, but scarcely more than a foot or two in depth. The current is rather swift, but without rapids, and the only dangers to be apprehended are the snags beneath the surface of the water. In the upper part of the river there are not many, but, lower down, the tremendous freshets which occur on the

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melting of the snows carry down trees of large size, piling them in enormous masses upon the banks, and depositing the water-logged trunks in the shallower parts of the river, a collision with which would probably result in the sinking of the canoe, from the liability of these craft to split. We progressed with tolerable rapidity, averaging about six versts an hour, rejoicing that stampedes were now things of the past, and that there was at least a possibility of some of our possessions reaching the journey's end unbroken. The river in its earlier course is very winding and Werchni Kamschatka, the next settlement we expected to reach, although only twelve versts from Sherowmy by land, is more than six times that distance by river. As far as our own feelings were concerned, however, we would willingly have prolonged it yet more, for weather and scenery were alike lovely. The river ran between pebbly banks lined with birches, whose white-barked stems contrasted with the brilliant gold of their foliage. Reach after reach of still water opened out to us its quiet beauty, and here and there a little gap revealed a Hobbema-like scene of sunny distance, whose clearness was unbroken by the waver of a single leaf. Far away in front rose a range of deep blue hills, jagged and peaky, patched only with snow, for their southern slopes had been thawed by the heat of the summer sun. The calm surface of the water was covered by little packs of duck, which rose in long lines as our rafts approached, and the smoke of our guns formed miniature clouds in our wake which hung motionless above the stream until the rounding of a corner hid them from our view. We paddled on silently, our natives talking but little. Now and again the warning *na pravo, na levo* (to the right, to the left) told of the neighbourhood of a snag, or a shallow bank necessitated the use of the poles; but for the most part our progress was one of uninterrupted quiet, and the laziest of Nature's lovers could have asked for nothing better than to sit and be paddled thus for the rest of his natural life.

We saw no four-footed game, with the exception of a couple of

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136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kamschatka River that is marked on the English chart of the country.
. 72 In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

22: Guillemard T-2 (1882) 1886 Kamchadal

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

22: Guillemard T-2 (1882) 1886 Kamchadal

Hitherto we had been able with the greatest ease to shoot as
136 many duck as were daily required for our party. At this part of the river, however, there were much fewer, but the birds of prey had considerably increased in numbers. The Ernes (*H. albicilla*) and Hobbies (*H. subbuteo*) were most common, and we procured a fine pair of the former. Neither of these species was shy, but it was only with considerable difficulty that we were able to get within shot of the Ospreys, which we found hawking the river in pairs, but less abundantly. We also shot a specimen of the Red-throated Diver, but our ornithological collection progressed but slowly, the number of species presenting themselves being extremely limited. In spite of the apparent absence of fish—for here but few lay dead upon the banks—the spoor of bear was as plentiful as ever, and an occasional one was more than once visible as we floated down. But unfortunately our journey had now resolved itself into a race against time, and delay was out of the question.

000 We broke camp long before dawn on the morning of the 6th September, and were afloat once more at 6.30 A.M. The morning was fine, but bitterly cold, and as the sun rose, the trees and long dank grass, glittering with the thick hoar frost, presented a rather more wintry scene than we desired. We were glad enough to seize the paddles and get what exercise was possible, and after two or three hours' sharp work we arrived at a bend in the river where a birch-bark hut and two or three canoes appeared to indicate the neighbourhood of a settlement. Not a soul was to be seen, but we learnt that Tschappina—a little hamlet of six houses—lay some five or six versts distant from the river, and at once despatched Afanasi to get what men he could. In three or four hours he returned, accompanied by four natives, but only two canoes were fit for use. The Mashura men, after some talking, offered one of theirs for the modest sum of forty roubles, and after half an hour's wrangling, we eventually became the purchasers for thirty. Its actual market value was less than ten, but we felt that if we could only get two more, we should be entirely independent of the natives, and considered it cheap. A further row then took place with

[i.e., below Mashura--analyst]

000 during our river journey nearly spoilt what was otherwise a very pleasant expedition.

We landed for a meridian altitude, and improvised an artificial horizon by means of a bucket of water. The banks were low and flat, and frequently intersected by muddy creeks, while the birches and firs had almost disappeared, giving place to the willow and wild cherry. I have rarely seen more impassable ground than that close to the river.[1] The coarse grass rose high around us, preventing the possibility of seeing anything—a condition which obtains in almost every part of the country; but an additional and far more effectual barrier to our progress existed in the shape of a thick tough brushwood which clothed the irregular ground with a network of small boughs, catching our feet firmly at every step. Later, at Cape Shipunsky on the south-east coast, we found the country even more impracticable. The bears, however, manage by their great weight to force themselves through this thick cover with little apparent difficulty. Just inside the forest, at a distance of six or eight feet from the river-bank, is a firmly-trodden path some two feet in width, made entirely by these animals; and as these paths are to be found without a break on either side of the river in its whole course through the forest country—a distance of about 500 miles—it will be understood why bears' skins do not command any very high price in the peninsula.

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The procuring of a sufficient quantity of duck for our daily needs became at this period a rather difficult matter, the main river being deserted by them for smaller streams and marshy pools in its vicinity. Sea-birds became more numerous; a tern (*Sterna longipennis*), two or three phaleropes, or the Red-throated and Black-throated Divers (*C. septentrionalis* and *C. arcticus*), were to be met with from time to time. We also shot a *Podiceps*, which seemed to be identical with our own Red-necked Grebe.[1] On the banks an

[1] According to Mr. Seebohm, the eastern form of *P. rubricollis* is conspicuous for its larger size, and especially for the greater length and stoutness of the bill; and the measurements of the above-mentioned specimens certainly bore this out.

[the Kamchatka River above Kojerevsky--Analyst]

136 eastern form of the Pied Wagtail (Kittlitz's *Motacilla lugens*) was extremely numerous; the Yellow Wagtail much less so. But of all the land birds the Kamschatkan Marsh Tit (*P. kamschatkensis*) was at this part of the river by far the most abundant. For two or three days we saw them in flocks of from fifty to a couple of hundred individuals, streaming northward along the bank from tree to tree.

133 Shortly after mid-day we passed the mouth of a river joining the Kamschatka on the right bank. The natives knew it as the Kojerevska. It is a stream of some size, being apparently of considerable depth, and having a breadth of forty yards at its junction with the main stream. As far as we could gather, it drains the opposing slopes of the Tolbatchinska and Kojerevska volcanoes.

We reached the little hamlet of Kojerevsky at nightfall. The distance from Tolbatchik, the scene of the last rows we had had with the natives, is only ninety-one versts instead of two hundred, and we might with perfect justice have reduced our payment to half of the sum we had promised. But, to tell the truth, we had become so wearied of the endless wranglings in which we had been involved in all our dealings with these wretched people that we paid them without a word. It was better to let them think that they had deceived us than for them to imagine that we had
262 weakly yielded to what we knew to be an imposition. We were
144 pleased to find that the Kojerevskans exhibited strong evidences of their Kamschatdale descent. We were received by the head-man, a little brown fellow with bright eyes; and under his direction the people did everything in their power to help us, carrying up our baggage, bringing us wood, and altogether showing us an amount of civility that was as new to us as it was agreeable. They provided us with wild cherries, cranberries, potatoes, turnips, milk, cream, and butter, and last, but by no means least, with a loaf of coarse rye bread, which, we heard, had been specially prepared for the Kluchi pope, who had been expected to pay the settlement a visit.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 we paddled out into the current, and in another ten minutes the village was lost to view.

114 In Findlay's "North Pacific Directory" it is stated, though upon
135 what authority is not clear, that the Kamschatka River "is said to
136 be capable of admitting vessels of 100 tons about one hundred and fifty miles up the stream." This, however, is not correct, or at any rate is very misleading, for the river is beset throughout with sand-banks which in many places apparently lie completely across the stream. Thus, opposite Kluchi village there was only an average of seven feet of water, while both above and below we got depths of twenty or thirty feet and more. The sand-banks also are very unexpectedly placed, and the navigation of the stream by a large vessel, even if possible, could only be accomplished by the aid of an elaborate system of buoys, which, I need hardly say, is not likely to be instituted for many a year to come. From some versts above Kluchi to the mouth of the river, except at the Tchoaki or narrows, to which I shall have occasion to refer presently, many islands are formed by the bifurcation of the stream, some of them of large size, and the river increases considerably in breadth. Opposite the village it is said never to freeze entirely over, a fact the people attribute to the existence of hot springs in the river bed. They also told us that salmon remain here throughout the winter, though not in any great numbers.

Among these islands there appeared to be more duck than we had been lately accustomed to see in the lower part of the river, and we here obtained the Shoveller (*S. clypeata*) for the first time. Landing to replenish the larder at some small lakes towards the hour of sunset, we remarked both snipe and wild geese, neither of which we had previously met with, but it was too dark to dis-
000 tinguish the species. Verglaski followed us on occasions such as these with the stolid expression and steady gait he always affected. Nothing short of a bear, I believe, ever roused him to any less dignified pace than a walk, and as he slowly followed us, I had a lurking suspicion that he regarded our occupation as a rather

22: Guillemard T-2 (1882) 1886 Kamchadal

000 a Swede—an agent of Mr. Phillippeus the fur-trader, and a crew of four Japanese. They told us that nothing had been seen of the

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PALLAS'S EAGLE. (*Thalassaëtus pelagicus.*)

000 yacht, and could give us no news of the civilised world, having been for some time lying in the river; so, after wishing them *bon voyage*, we continued our journey.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 The natives are prevented by law from barring the river in the lower part of its course, and here the salmon are taken chiefly with
252 seine and drift nets. The V-shaped curral-trap of stakes, with
262 baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 The low and muddy shores of the river in this part of its
224 course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

22: Guillemard T-2 (1882) 1886 Kamchadal

000 acres, yet, absurd as it may seem to those of my readers who have had no experience of the denseness and impassability of the vegetation in these and similar regions, I more than once wondered if I should ever get through. I have certainly never been more completely exhausted than when I finished the last yard and rolled helplessly upon the grass on the other side.

After a rest on board the yacht I rowed along the coast to pick up the game, two of which had rolled down five or six hundred feet upon the beach below. Passing beneath the cliff at the entrance of the bay, we witnessed the death of a bighorn under unusual circumstances, for the animals are in general as sure-footed as a chamois. A couple of them had been driven into a corner by some of our party at the top of the cliff, but one broke back almost immediately. The other, perched on a little pinnacle at the edge of the precipice, seemed about to follow its comrade, but hesitated, turned, and ran back. As it did so its foot slipped. It checked itself for a moment, slipped again, made one desperate effort to regain its footing, and was over in an instant. The creature never moved a muscle as it fell, and hit the rocks four hundred feet below with a dull scrunching thud, breaking one of the massive horns short off, and converting the hind quarters into a shapeless, bleeding pulp.

Before dusk we had got on board no less than nine bighorn, and the yacht's decks were more like a butcher's shop at Christmas than anything else. We were busily engaged in measuring, skinning, and weighing during the evening, and when, wearied with the day's exertions, we turned in for a well-earned night's rest, we looked forward to the prospect of equally good sport on the morrow.

136 The general colour of the Kamschatkan Wild Sheep (*Ovis nivicola*, Eschscholtz) is a brownish grey, and the hair of those we obtained was very long and thick, so much so that we concluded that the animals had assumed their winter coat. The head and neck are more distinctly grey than the rest of the body, the forehead

22: Guillemard T-2 (1882) 1886 Kamchadal

136 is marked with an ill-defined dark patch, and the lips are nearly white. On the anterior aspect the legs are of a dark glossy brown, but posteriorly a narrow white line runs down the entire length

KAMSCHATKAN BIGHORN. (*Ovis nivicola.*)

of the limb. The tail is short and dark brown; the rump and the centre of the belly pure white. The ears are remarkably short.[1]

The Bighorn in Kamschatka appears especially to frequent the

[1] Sir Victor and Mr. Basil Brooke in their article on Asiatic Sheep in the "Proceedings of the Zoological Society" (1875, p. 509), remark on the resemblance of the horns of this species to those of the American Bighorn (*Ovis montana*), with which, indeed, it has by some naturalists been regarded as identical. But the uniformly smaller size of the head, the shortness and great breadth of the skull in its anterior aspect, the slight development of the pre-orbital fossa, and the protuberance of the orbit itself, serve markedly to distinguish the Kamschatkan species. The horns are less rugose than those of *O. montana*; their frontal surface is convex; the orbital surface at first concave, then flat, thus causing the fronto-orbital edge to be very sharp. The nuchal surface is convex, and afterwards flattened, and the two remaining edges are rounded.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 precipitous slopes of the sea-cliffs, though it is met with in some numbers in the interior of the peninsula. We had evidence of its occurrence in the mountain ranges near Gunal and Narchiki in the

SKULL OF *Ovis Nivicola.*

The following are the measurements obtained from a series of nine skulls :—

	Inches.								
Length of skull	10½	10½	9¾	10¼	10¾	9¾	10½	10¼	...
Breadth between orbits . . .	5¾	5¾	4¾	5½	5¾	5½	5½	5¼	...
Length of horns round curve . .	35	34¾	24	32¼	35½	38	32½	26½	35
Circumference of horns at base .	13¼	14½	13	14	14	13½	13¾	12½	13¼
Horns from tip to tip . . .	21	25	17½	21	26¾	26	22½	21½	25½

Measurements in the flesh of twelve specimens, all of which were adult males, were also taken, and are as follows :—

Supposed age (years)	3	3	5	5	5	5	6	6	6	6	6	6
Extreme length .	65½	63	62	64	64	66	66	65	66	66	67	67
Greatest girth . .	53	53	56	54	55	...	56½	...	54	53	54	55
Height at shoulder .	38	39	38	39½	37	...	40	41	40	37	40½	39

22: Guillemard T-2 (1882) 1886 Kamchadal

136 Bolcheresk Valley, and it probably exists at low altitudes on the great volcanoes near the mouth of the Kamschatka River. Every one of those we shot was a male,—their ages ranging, as far as we could judge, from three to six years. They kept in small herds of from three to nine individuals. As in the case of others of the same genus, the females and young males doubtless keep apart, but we were not fortunate enough to discover their habitat, neither could we obtain any information about them from the natives.[1]

Early next morning the most enthusiastic of our party proceeded in the lifeboat to the ground of the preceding day, hoping to add still further to the bag, while two of us started to explore the
133 magnificent harbour at the entrance of which we lay. Betche-
136 vinskaya Bay, the position and extent of which is but roughly indicated in the Russian charts, is a narrow inlet some five miles in depth, girt with precipitous cliffs of three or four hundred feet for the seaward third of its extent. At this point two low and narrow strips of beach run out from the base of the cliffs on either side, leaving a passage barely fifty yards in width in the very centre of the fjord, but deep enough to admit a vessel of the largest size. Within this the cliffs disappear, and an extensive and perfectly land-locked basin is entered, surrounded by high hills sloping gradually to the water's edge—as good a harbour as it is possible to imagine. Of the mode of formation of the two promontories I have just alluded to I can offer no explanation. They are so unnatural in appearance, and so closely resemble artificial breakwaters, as at once to attract the notice of the most careless observer. The long spit of beach running out at the entrance of Petropaulovsky harbour is of exactly similar formation, and the same phenomenon is said to occur at other places along the coast. Nature is not very lavish of her harbours on these shores, but the few that exist are excellent.

As we entered, the placid surface of the inner basin was dotted in every direction by the square black heads of seals, of which

[1] Cf. article by the author *On Ovis nivicola*, "Proc. Zool. Soc.," 1885, p. 675.

22: Guillemard T-2 (1882) 1886 Kamchadal

133 there appeared to be enormous numbers. But as we intended to
136 try for bear at the head of the bay we left them in peace. The wind, however, sprang up and blew directly inland, and all chance of sport being under these circumstances reduced to a minimum, we reluctantly returned. That bear were very abundant in the neighbourhood was evident from the numberless fresh tracks, and from the fact that we saw seven in two days, but owing to their shyness and the dense undergrowth they frequent, they are not easy to shoot. We had therefore to turn our attention to the seals, whose skins Jacof seemed anxious to obtain. They were the ordinary *Phoca vitulina* of our own coasts, or a very closely-allied species.

Landing on the natural breakwater on our way back, we were astonished to find a spring of fresh water close to its extremity. The pools formed by it were covered with teal and other duck, and with these and a stray golden plover or two we had good sport. The place seemed to be a favourite resort of bears, who had formed
000 numerous paths to the spring; but ill-fortune once more attended us, and we had to be content with a distant view of one of these animals, who made off at full speed. We returned to the *Marchesa* to find that considerable additions had been made to the bag by the other party. Four more *Ovis nivicola* and a walrus had been killed, the latter carrying very fine tusks, nearly two feet in length. Hunting these creatures is after all but a sorry business. In order to afford sport an animal should either fight or run away. The poor walrus does neither—at least to any purpose—and having once killed one, no sportsman would care to repeat the performance.

I have been led to describe the events of our two days' visit to Betchevinskaya Bay as an illustration of the abundant sport to be obtained in Kamschatka. Our total bag consisted of one walrus, fourteen bighorn (one, falling in an inaccessible place, was not brought in), and some seals, besides teal, duck, and golden plover. Had we been ordinarily fortunate we should also have obtained two bears, which, though badly hit, managed, owing to the

24: Lansdell-636-637 M-2 (1879) 1882 Kamchadal-1-2
116, 136, 231, 492

" Among the animals of Kamchatka there is none with which the traveller becomes more familiar than the dog, which is found wild on the hills. The color is usually buff or silver-grey, and in nature and disposition he resembles the mastiff and the wolf, [637] sleeping, like the latter, more by day than by night. He is intelligent as regards his work, but not affectionate, as may be said of the steppe dogs, and has to be ruled by the rod. It is not usually safe to leave these dogs loose, for they kill fowls, deer, smaller dogs, and sometimes even children.(1) As on the Amur, they are usually fed on fish,

1. They love sledging, and upon a journey of four or five days will work from 14 to 16 hours out of the 24 without tasting food, the idea of their masters being that, when travelling, the less food the dogs receive, short of starvation, the better. The travelling sledge weighs about 25 lbs. (a freight sledge is heavier), and a good team will travel from 40 to 60 miles a day. When running, they must be paired with dogs known to each other from puppies; and, should they happen to cross the scent of a deer, so fond are they of its flesh that they sometimes become utterly unmanageable, upset the sledge (or nartee, as it is called), and leave the driver, it may be, to perish in the snow.

particulary the salmon, besides which there are caught in Kamchatka, or off its coasts,

24:Lansdell-636-637 M-2 (1879) 1882 Kamchadal-2
116, 136, 231, 492

the cod, herring, smelt as also whales, walruses, and seals. The country abounds with geese, ducks, and a variety of wild fowl."

27: Sauer--293 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The western coast of Kamtshatka is uniformly low and sandy, to the distance of about 25 to 30 miles inland, where the mountains commence. It produces only willow, alder, and mountain-ash, with some scattered patches of stunted birch-trees. The runs of water into the sea from the mountains, do not deserve the name of rivers (except the Bolshoia Reka), though they are all well stocked with fish from the sea in season, as trout and different species of salmon. They are generally at the distance of 15 to 20 miles from each other. The Itsha and Tigil are the most considerable; and neither of these have a course, with all the windings, of more than 100 miles.

The sea is shallow to a considerable distance; and the commanders of the transport vessels, who never lose sight of the exposed coast if they can help it, judge of their distance from land, in foggy weather, by the soundings, allowing a fathom for a mile; nor is there at the entrance into any of the rivers more than six feet at low water, with a considerable surf breaking on the sandy beach."

27: Sauer--298 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137, 161

"Near the mouth of this harbour [CMC: of Tareinsk in Avacha Bay], on its north-west borders, is a valley forming a plain of about one mile and a half square, well wooded with good sized birch trees: a situation which Major Behm thought the most eligible of any hereabouts for a town. North and south are lofty mountains of easy ascent, covered with trees to their summit. The valley is bounded to the west by a fresh water lake of about 15 miles in circumference, well stocked with fish all the year through; while its borders abound in different kinds of berries, sarana, tsheromtsha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief source of the river generally known by the name of the Paratounca, of which I shall shortly give an account, as also of the other rivers. The remains of numerous villages in the vicinity of this lake strongly indicate the former popolousness of these parts; but they are at present overrun with bears, wolves, and hares."

27: Sauer--298 [2] T-2 (1789-93) 1802 Kamchadal
116, 136, 226

"The fish of the bay of Avatsha are, cod all the year through; thornbacks, flounders, and halibuts, as soon as the ice begins to break; whitings are caught all the winter by the boys and girls, who make a hole in the ice, lie flat upon it, and look into the water, holding in it a horse-hair noose on the end of a stick, which they get round the fish, and by these means haul them up very fast. Herrings and smelts are the first passage fish that appear (the former in immense shoals towards the latter end of April), and they remain till the beginning of June: their numbers, indeed, are incredible."

27: Sauer--299-300 T-2 (1789-93) 1802 Kamchadal-1-2
116, 136

"On the 7th June, in the inner harbour of St. Peter and St. Paul, I observed, at the flood tide, a considerable number of herrings swimming round in circles of about a fathom in diameter. Seeing them continue in this particular manner, I approached very near them, and remarked, in each of the circles, one fish very close to the ground, upon the weeds, and apparently without motion. I could not account for this peculiarity in their swimming, but thought that the weeds about the herring in the middle became of a very lively yellow colour. When the tide ebbed, and left these places dry, all the weeds, stones, sticks, &c. were covered with spawn about half an inch thick, which the dogs, gulls, crows, and magpies, were devouring with great avidity. These shoals of herrings, which are pursued by seals, cod, &c. come in spring and in the autumn; there is, however, a considerable difference in their size; and I believe the spring glut are the largest fish. The natives and other inhabitants ensnare a great quantity in autumn for their dogs.

The oil extracted from herrings is very pellucid and sweet; it preserves birds' eggs all the year quite fresh and good, as does also the oil of seals, whales, &c.

Herrings no sooner disappear, than immense shoals of salmon push into the bay and up the rivers; the first is the smaller sort, called the gorbushka (or hunch-back), from a remarkable protu-[300]berance which distinguishes this species. They are in great perfection about four or five weeks; and are no sooner in a state of decay, than another and larger species follows. These are succeeded by other sorts, all of the salmon kind,

until the end of September. I could not distinguish some sorts till they were boiled, when the paleness or redness of the flesh indicated a difference. The names of the different species are siomga, tshavissha (both very large), gorbushka, kaiko, krasnaia (red), and belaia (white). They push up the rivers, and get into the lakes, where the two latter continue all the winter, but get extremely deformed, crooked-backed, thin, and covered with red blotches; the upper jaw extends beyond the under jaw, and bends over it; the mouth is full of very large teeth, and the flesh is flabby. Here are also great varieties of crabs, sea eggs, prawns, muscles, cockles, and the small pearl oyster."

27: Sauer--300-301 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The plains of Avatsha, which bound the bay to the north-west, extend 18 miles from east to west, and 35 miles from north to south, producing at their northern extremity only a few patches of birch, poplar, and alders; all the rest are marshy grounds, overgrown with rushes and coarse high grass, with some spots of oziers and alders; the resort of myriads of water fowl, swans, geese, an amazing variety of the duck kind, and I believe every species of snipe. The river Avatsha runs in several branches through this plain. Towards its northern extremity are an immense number of cold springs, that form several basins of water, with small runs, uniting in a rivulet, which has a course towards the south of two miles, and empties inself into the river generally known by the name of the Paratounca, but which is called by the natives Ilmitsh; and the original Paratounca is the run from the springs above mentioned, opposite to the discharge of which the village of that name is situated. These springs do not [301] freeze in winter, during which season they are frequented by swans, geese, and several species of duck, particularly the safka, or duck with a melodious note, which has induced me to stile it musical. Here they find an abundance of food, and the pulpy root of an aquatic plant which, in its appearance, exactly resembles the olive, but is like the chesnut in flavour: I used it as a vegetable, and thought it better than any production of the gardens; the natives call it the sarana of the geese."

27: Sauer--302 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 777, 825

"Here are no lakes of any extent: the names of the principal ones are, Osernoi, about 40 miles from Cape Lopatka; Kronotskoi, 20 miles south-east of Tolbatshinski volcano; and another of less extent, situated about 40 miles north of Neizshni Kamtshatka, called Nerpitshi: the natives say that they are replete with fish; and tradition relates, that the fish of these lakes had two heads, or that they possessed legs; and, being sacred to some deity or demon, those who presumed to ensnare them were punished with misfortunes: some of the natives, however, seem to doubt the truth of this, while others still firmly believe it."

28: Sarytschew--60 T-1 (1789-90) 1806 Kamchadal
116, 136, 224

"At the entrance of the bay of Awatska, we passed a light-house, erected on a lofty rocky prominence, on the left of which was an insular mountain of stone, called Staritschkow, after the name of a bird that frequents it in great abundance. The staritschkow is a bird about the size of a pigeon, with a bluish bill, and small feathers, of a bristly kind; its head is of a purple colour, having a circle of white feathers in the middle, which are thinner and longer than the rest. Its neck is black above, with white spots underneath. Its body is white, the short large feathers of its wings blackish, and the rest blue; its sides and tail black; its feet red, and trebly indigited with a web between each, and its claws black. On the little islands of Kamtschatka they are found in vast numbers, and are caught by the Kamtschadales with great facility. Besides this bird, there are also sea-parrots, mews, and urilas, the latter of which paid us a visit of curiosity as before, and then disappeared."

28: Sarytschew--62 T-1 (1789-90) 1806 Kamchadal
116, 135, 136

"By some beds of rock in this peninsula [CMC: at the entrance to Petropavlovsk harbor], we discovered green jasper marl, on which were the representations of shrubs or trees; we also found, in the crevices of the rocks, some layers of amaranth, not very large, and remarkably thin.

For some time after our arrival, there was no fresh fish to be had. In the beginning of November, we began to catch wachnas in abundance, and occasionally herrings. The wachna, (Gadus æglesinus), is a sort of stock-fish, about half a yard in length, with a roundish body, and three dorsal fins. When taken out of the water, it is perfectly of a copper colour, but soon turns quite pale. Its flesh is white, but soft, and not pleasant to the taste. The roe is, however, of a fine texture, and has the best flavour. It is an inhabitant of the European Ocean, but most frequently found in Kamtschatka."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 sent holder, who, though I feel assured he appreciates it highly, yet would not retain it, should relations, or others more nearly concerned, express a desire to be possessed of so valuable a memorial.

133 From Kharchina the route lies over a large lake,
137 and thence over a fine open country, abounding
361 with some of the finest fir-trees I have ever seen, reaching to the height of sixty and eighty feet. At twenty miles we reached the ostrog of Kamennoy, on the right bank of the Kamtchatka, and, changing dogs, proceeded twelve miles farther to Kama-
136 kie over numerous lakes near the river. The coun-
361 try here abounds with red foxes, and is certainly one of the most picturesque parts of the Peninsula: the beautiful view of the Sopka, or Peak of Cliuchie, was hid in the clouds. I movedon to wards Nishney Kamtchatsk, also an antient capital in the Peninsula, a far more eligible place than the pre-
000 sent site. The weather had now become very mild, no less than 3° of heat of Reaumur. We made good about seven miles of our journey through very deep snow by the ensuing morning. For three hours we did not move forward more than one mile, a heavy fall of snow had taken place, and it was found impossible to proceed, owing to the extraordinary heat of the weather. No track nor scent offered to the dogs, otherwise I would have persisted in the prosecution of my journey. The drivers, however, with snow shoes actually sunk eighteen inches deep in the snow, and I was therefore com-

29:Cochrane T-2 (1821-22)1824 Kamchadal

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2(1821-22)1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2 (1821-22)1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

29:Cochrane T-2 (1821-22)1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters will be found, who will prefer to administer justice with clemency and honor, to the degrading of their characters by a mean and derogatory traffic. If an increase of rank, double pay and provisions, an extra pension, and the most unlimited powers are not sufficient to ensure a just discharge of the duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

29:Cochrane T-2 (1821-22) 1824 Kamchadal

136 first and second isle, to bring the tribute and furs. Foxes are said to be the only animals of the chase, and here they abound in all colours. Sea otters were also formerly taken, and still, at intervals, visit some of the islands. Excepting those caught near Nishney Kamtchatsk, they are considered the most valuable of the species.

[on the norther Kuril Islands--Analyst]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

We now come to confider the rivers that fall into the Eaft Sea from the mouth of the *Awatfcha*, towards the fouth, to the *Kurilskaya Lopatka*; and from the *Kurilskaya Lopatka* into the *Penfchinska* fea to the *Tegbil* and the *Puftaia* rivers. 133

There are but few rivulets that interfect the country between the mouth of the *Awatfcha* and the *Lopatka*. The ridge of mountains, which divides *Kamtfchatka*, extends to the Eaft Sea: the declivity is fteep and craggy; and the gulphs and bays, which are formed by thefe mountains, afford a fafe harbour for veffels of any burthen in the worft weather.

The *Kurilfkaya Lopatka*, which by the natives is called *Kapoore*, is the fouthernmoft point of the cape of *Kamtfchatka*, and divides the eaftern from the *Penfchinska* fea: it takes its name from its refemblance to a man's fhoulder-blade. Mr. *Steller*, who has been upon the *Lopatka*, fays, that the place is not more than 10 fathoms above the furface of the fea, and for that reafon is fubject to great inundations, fo that for 20 verfts from thence no-body lives, except thofe who come there in the winter to catch foxes; and when the ice is carried thither with the beavers on it, then the *Kuriles*, who follow this ice along the fhore, affemble here in great multitudes. Within three verfts from the *Lopatka* nothing grows except mofs; and there are neither rivers nor fprings, only a few lakes and pools. The foil confifts of two layers, the lower is ftrong, and the upper fpongy; and its furface is full of hillocks, and ufelefs. The firft rivulet falling into the *Penfchinfka* fea, is called the *Utatumpit*; two verfts from the *Utatumpit*, the rivulet *Tapgutpan* runs into the fea, upon which ftands a fmall fort called *Kochinskoy*; and three verfts from thence is the *Pitpuy*, or *Ozernaya*, which runs out of a confiderable lake divided from the fea by a mountain. The *Ruffians* call this river *Kambala*, or Flounder River, becaufe great numbers of flounders are caught in the mouth of it. 103 133 134 137 133

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way. 133 123 782 777

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn-wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh- 133 137 372 313 342 [101] 177 439

 ed

the company's land, but ſeveral doubt this; for, according to his opinion, that land ought to be the baſe of the triangle of the *Kuriſki* and the *American* iſlands; this would be probable, if the company's land ſhould be rightly laid down in the maps.

America enjoys a much better climate than the coaſt of the north-eaſt ſide of *Aſia*, although equally near the ſea, and every where full of high mountains, which are continually covered with ſnow; but they have greatly the pre-eminence when we compare their qualities with thoſe of *Aſia*. The mountains of *Aſia* being every where rocky and ragged, they loſe their compactneſs and internal native heat; for which reaſon they have no valuable metals, nor any trees or herbs, and in the vallies there grows only ſmall ſhrubby wood and hardy herbs. The *American* mountains are cloſe and their ſurface not covered with moſs, but with a fruitful earth, for which reaſon they are cloathed from the bottom to their tops with a thick and fine wood. The herbs that grow at their feet are of that kind that grow in dry places, but not in marſhes; and the ſame herbs grow in the vallies as on the very tops of the mountains, becauſe there is every where an equal warmth and moiſture. But in *Aſia* it is quite different, for the ſame herb grows twice as high in the plain as in the mountains.

In *America* at 60° the coaſt is covered with wood; but at *Kamtſchatka*, which is only 51° of latitude, the ſmall willows and poplars do not grow nearer the ſea than 20 verſts, and birch wood not nearer than 30, nor the pitch wood along the river *Kamtſchatka* nearer than 50 from its mouth: and in *Kamtſchatka*, in 62°, not one tree is to be found. In Mr. *Steller*'s opinion *America* extends from the before-mentioned latitude to 70° and farther, and is defended and covered from the weſt by the above wood; but on the coaſt of *Kamtſchatka*, eſpecially upon the *Penſchinſka* ſea, it is quite barren, being open to the

violent

137 violent north winds, which blow here frequently; and we find that places lying farther north are more fruitful, as about the *Tchukotſkoi* Noſs, where they are covered from theſe winds.

000 It is likewiſe obſerved, that the fiſh enter the rivers in *America* earlier than in *Kamtſchatka*. Great plenty of fiſh have been ſeen there on the 20th of *July*, at which time in *Kamtſchatka* they only begin to appear. There are a ſort of raſberries of a very extraordinary ſize and fine taſte; beſides honeyſuckles, cranberries, blackberries, and bilberries in great plenty.: as alſo ſeals, ſea-beavers, whales, dog-fiſh, marmotta-minor, red and black foxes which are not ſo wild as in other places, perhaps becauſe they are ſeldom hunted.

Among the known birds have been obſerved magpies, crows, ſea-gulls, water-cranes, ſwans, ducks, quails, plovers, *Greenland* pigeons, and fowls called northern ducks; and among the unknown, ten kinds diſtinguiſhable from any ſpecies of *European* fowl.

171 The natives there,[1] who are as wild as the *Koreki* and the *Tchukotskoi*, are plump, broad ſhouldered, ſtrong boned, of a middle ſize, with ſtreight and black hair which hangs looſe. Their faces are ſwarthy and flat, their noſes ſomewhat pointed but very broad, with black eyes, thick lips, ſmall beards, and ſhort necks. Their ſhirts, which come lower than the knee, are girded about their bellies with leather ſtrings; and their breeches and trowſers are made of the ſkins of ſeals dyed with alder, and are like thoſe of the *Kamtſchatdales*. To their girdles they hang iron knives in caſes, like thoſe worn by the *Ruſſian* boors. Their hats are made of graſs, as thoſe of the *Kamtſchatdales*, without tops, in the ſhapes of umbrellos, dyed with green and red colours, with falcons' feathers before, or with graſs that is combed out, which looks like the plumage that the *Americans* uſe about *Brazil*. They feed on fiſh, ſea animals, and the ſweet herb, which they prepare

1. [in America across from Kamchatka]

THE NATURAL HISTORY OF

KAMTSCHATKA.

PART II.

CHAP. I.

137

Of the SOIL.

UPON the banks of the river *Kamtſchatka* is found plenty of roots and berries, which in ſome meaſure ſupply the want of corn. There is alſo wood ſufficient not only for building houſes, but even for ſhip-building; and Mr. *Steller* is of opinion, that near the head of this river, both ſummer and winter corn would grow as well as in any other places in the ſame latitude, the ſoil being deep and rich; and though ſnow falls in very great quantities, yet it thaws early enough, and the ſpring is not ſo rainy, nor have they ſuch damps, there as in many other places. Several tryals of ſummer-corn have been actually made both in the upper and lower *Oſtrog* * of *Kamtſchatka*; in which both barley and oats have ſucceeded. At the monaſtery of our Lord of *Jakutſki*, they have

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* *Oſtrog* is a little town fortified with palliſades, where the *Ruſſian* Coſſacks, and other inhabitants live.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

134 241 ſeveral years paſt ſown ſeven or eight poods † of barley, which yielded a crop not only ſufficient for groats and meal for their own uſe, but even enough to ſupply their neighbours, though they are obliged to plough their land with men.

All garden ſtuff thrives not alike; the moſt ſucculent produce only leaves and ſtalks. Cabbage and lettice never grow to any head, and the peas continue in flower until late in the harveſt without yielding ſo much as pods; but garden roots which are full of juice, ſuch as turnips and radiſhes, grow very well. Theſe tryals, however, were only made upon the banks of the Great River and *Awatſcha*. Such things as require a hot ſoil, grow very well every where, but ſtill beſt upon the *Kamtſchatka*. Upon the Great River I never ſaw any turnips larger than three or four inches diameter; but upon the *Kamtſchatka*, I have ſeen them four or five times as big.

137 The graſs grows here ſo high, and is ſo full of ſap that one ſcarcely ſees any thing like it in all the empire of *Ruſſia*; near the river and lakes, and in the opening of the woods, it riſes to above the height of a man, and ſo faſt that it may ſometimes be mowed thrice in a ſummer; ſo that few places can be more proper for breeding of cattle; and although the blades are thick and high, and make but a coarſe ſort of hay, yet the cattle are large and fat, and give plenty of milk both ſummer and winter, which I attributed to the richneſs of the ſoil and the ſpring rains. The graſs continues full of juice, even to the beginning of winter, which being condenſed by the cold prevents the graſs from turning hard during that ſeaſon. As the graſs is ſo high and thick, a great deal of hay may be made upon a ſmall ſpot; and the cattle can find food in the fields all the winter. The places where 132 the graſs thus grows are never ſo much covered with ſnow as the bogs and ſwamps, and for this reaſon it is difficult to travel over them in the winter.

† A pood is a *Ruſſian* weight of 40 lb.

In

134 present are no woods, but only ſhrubs, and ſtunted ſallows, and birches, were formerly covered with water, which has decreaſed by degrees here, as it has upon the north-eaſtern coaſt. Below the earth lies a bed of pure ice, extremely hard; and under that a ſoft wateriſh clay, with gravel; this continues from the ſea up to the very mountains, and will ſufficiently account for the barrenneſs of theſe parts. But, though the land is not every where fit for agriculture, yet ſome places upon the river *Kamtſchatka* (which have been already mentioned) and along the *Biſtroy* river, are ſufficient to furniſh with corn, not only the inhabitants, but alſo the neighbouring parts. It is however to be feared, that the burning of the woods, in order to clear the lands, may drive away the ſables, who have a particular averſion to ſmoke: this happened upon the river *Lena*, formerly the beſt hunting country, but now deſerted by theſe animals.

137 The ſcarcity of wood is a great inconvenience, both the *Ruſſians*
313 and natives being obliged to fetch it twenty or thirty verſts with
489 great trouble and loſs of time, for the neceſſary uſes of boiling their ſalt and curing their fiſh: and it is very difficult to bring it down in floats, becauſe the current is rapid and ſo ſhallow, that they can bring only two little bundles on each ſide of a ſmall fiſhing-boat; otherwiſe they would obſtruct themſelves in the management of their boat, and thereby run the riſk of being driven upon the rocks, ſand-banks, and trunks of trees, where not only their boat and wood, but frequently the people themſelves are loſt. Sometimes the ſcarcity of wood is ſupplied by ſuch as is thrown up by the ſea, which the inhabitants gather upon the ſhore; but this wood that has been ſoaked in the water, although they are at great pains to dry it, never burns clear, but ſmothers away with a continual ſmoke very hurtful to the eyes.

137 At the diſtance of 30 or 40 verſts from the ſea, and near the
313 heads of the rivers, grow birch-trees, alder, and poplar; of which the people build their houſes and make their boats. But this

this they bring down with great difficulty, using the method above mentioned: for which reason a very poor house will cost here 100 rubles and more, and a small fishing-boat five rubles. In other places, where the hills are nearer the shore, and the water-carriage easier, wood for firing and building is much cheaper. 137 313

Upon the *Bistroy* river, which falls into the Great River below the *Bolschereteskoi Ostrog*, grows the best wood that is in these parts; even the birch-trees are so large, that captain *Spanberg* built a sloop with their wood, in which he made several distant voyages to sea. 137

It is very remarkable, that when this vessel was launched she lay as deep in the water as a vessel full loaded; and it was believed, that she never would be fit to go to sea, but that the smallest loading would sink her. But, when she was laden, she drew very little more water, and few vessels sailed better or lighter, or could go nearer the wind: the reason of which may be, that as this wood has not so much rosin, it sucked a greater quantity of water at first, but so soon as its parts were once filled, it then sucked very little more.

There is great plenty of wood upon the eastern coast of *Kamtschatka*; from the hills down to the very shore grow very fine birch and alder trees. Beyond the river *Jonpanoba*, and towards its head, begin the woods which continue to the *Kamtschatka*, *Lopatka*, and along the river *Kamtschatka* to the mouth of the river *Elouki*. Up the river, almost to its head, grow likewise pines, but not large enough for buildings. About the neck of land which joins the peninsula of *Kamtschatka* to the continent, the wood begins again to fail.

The changes of the weather and air are commonly in the following order: harvest and winter make up more than one half of the year; and the spring and summer cannot be reckoned 132

above

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137/313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix.
† Populus alba.
‖ Pinus.
‡ Populus nigra.
** Picea.
†† Betula.

The birches of

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough ‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthes fructu rubro et nigro.
** Sorbus.

the

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-m[illegible]ry† them in the ſun, and
435 ſell them for five or ſix rub[illegible]es the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Harioufkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry?"

which

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is absolutely necessary. 177 The *Russians* were no sooner settled there, than they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. 137 The stem is fleshy, of three or four joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inhabitants gather and prepare it in this manner: they cut off the 222 252 stalks of the leaves which grow nearest the root, and with a shell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

222 252 ſcrape off the ſkin; and then bind up ten ſtalks together. When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 222 The women, when they gather this,[1] muſt wear gloves; for the juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 556 The manner of diſtilling ſpirits from it is as follows:---They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.]

is only the richer fort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. LINN. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliis pinnatifidis Linn. Cliff.

boil

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

ſhew itſelf under the ſnow: and I have heard an extraordinary account of its virtues from the Coſſacks that were employed with captain *Spanberg* in building the ſloop Gabriel: they were ſo ill with the ſcurvy, that ſcarce any were able to work, or even to walk, ſo long as the ground was covered with ſnow; but as ſoon as the high lands began to appear green, and the wild garlick to ſprout out, the Coſſacks fed upon it greedily. Upon their firſt eating it, they were covered over with ſcabs in ſuch a manner, that the captain believed they were all infected with the venereal diſeaſe. In about a fortnight, theſe ſcabs fell off, and they were perfectly recovered of the ſcurvy. 757

We muſt reckon amongſt the food of the *Kamtſchadales* the ſhelmina *, and the morkovai †, which is the ſtalk of a plant that is hollow and juicy, ſuch as the angelica. The ſhelmina is a ſpecies of the ulmaria. Its root is blackiſh without, and white within: it ſends out from one root two or three ſtalks about a man's height; which, near the root, are about a finger thick, but above, ſomewhat thinner. The leaves ſhoot out from long branches which grow all over the ſtalk. Their upper part is green and ſmooth; and their lower rough, with high reddiſh veins. Where the branch ſprings from the root there are two leaves like thoſe above deſcribed, but ſomewhat leſs. The ſtalk is triangular, reddiſh, hard, and rough. At the top of the plant is a flower reſembling that of the ſervice-tree. It has four oval piſtils, flattened in the ſides, with downy edges; in each of which are contained two longiſh ſeeds. They are ſurrounded by ten white ſtamina, riſing above the flower; the anthera being likewiſe white. It flowers about the middle of *July*, and the ſeeds are ripe about the middle of *Auguſt*. The root, ſtalks, and 137 262

* Ulmaria fructibus hiſpidis. STELLER. † Chærophyllum ſeminibus levibus nitidis, petiolis ramiferis ſimplicibus. LINN. Cliff. p. 101.

137 leaves of this plant are very aſtringent: both the *Ruſſians* and
252 *Kamtſchadales* eat it in the ſpring. They preſerve the root[1] for
262 winter, which they ſtamp and boil for a gruel. It has ſome reſemblance in taſte to the Piſtacho nut.

The morkovai pouſhki, or carrot bunches, are ſo called becauſe they are like carrots in their leaf as well as in taſte. They likewiſe eat this green in the ſpring, but they oftener ſour it like ſour crout, or make a liquor with it.

137 The kotkonia * grows upon the banks of the rivers of *Kamtſchatka* in great plenty. Its root is about the thickneſs of one's finger, bitter and aſtringent, black without, and white within. Sometimes five, but always more than two ſtalks ariſe from this root, about ten inches high, of the thickneſs of a gooſe-quill, and of a yellowiſh-green colour. At the top are three oval leaves ſpread like a ſtar, from the middle of which riſes a ſtalk half an inch high, which ſupports the flower. The cup of the flower conſiſts of three oblong green leaves, and the flower itſelf of as many white ones. In the middle of the flower is the piſtil, of ſix ſides, a yellow colour, with a red top: it contains three cells, and is ſurrounded with ſix equal yellow-coloured ſtamina; the anthera is alſo yellow. When the piſtil is ripe it is as big as a walnut, is ſoft, fleſhy, and of an agreeable taſte, like a pleaſant apple. It flowers about
262 the middle of *May*. The *Kamtſchadales* eat the root of this plant both freſh and dried, with caviar; but the fruit muſt be eaten as ſoon as gathered, for it is ſo delicate that it ſpoils if it be kept one night.

137 The ikoume ‡, or biſtort, grows in plenty both on the hills and
262 in the vallies. The *Kamtſchadales* eat it freſh or dried, and

* Tradeſcantia fructu molli eduli.

‡ Biſtorta foliis ovatis oblongis acuminatis. LINN. Cliff.

1. [Shelmina, Ulmaria fructibus hispidis. pounded Steller]

pounded with caviar. It is far from being ſo aſtringent as that in *Europe*, is juicy, and taſtes like a nut. 137 262

Utchichlcy † is a plant that has leaves like hemp, but flowers like the ragwort. When the leaves are dried, and boiled with fiſh, they make the broth taſte as if the fleſh of the wild goat was boiled in it.

The root called here mitoui, and at *Jakutſki* ſardan, they fry in the fat of fiſh, or ſeals, and eſteem it a delicate diſh.

Theſe are the principal plants which they make uſe of in 262
their kitchens; however there is a great number of others, and 824
alſo of plants thrown out by the ſea, which the *Kamtſchadales* eat both freſh and dry in the winter: for, as Mr. *Steller* obſerves, they refuſe nothing, but eat every thing they can get down, even the drieſt plants and naſtieſt rotten muſhroons, although one would imagine the conſequence dangerous, as indeed it ſometimes happens. However, he tells us the natives have obtained ſuch a knowledge of plants, and of their uſe both in food and medicine, that he is ſurpriſed; and that one ſhall not find ſo much knowledge of this ſort among any barbarous nation, nor even, perhaps, amongſt the moſt civilized. They give a name to every one of their plants, and know all their properties, and the different degrees of virtue which they derive from the various ſoils and expoſitions in which they grow; and ſo accurate are they in theſe diſtinctions, and alſo in the proper time of gathering the ſeveral fruits and other produce, that it is truly wonderful. Hence the *Kamtſchadales* have this advantage above other people, that they can find food and medicine every where; and, by their knowledge and experience, are in little danger from the noxious plants.

† Jacobea foliis cannabis. STELLER.

137 Amongſt the medicinal plants we muſt mention the fol-
278 lowing: 1ſt, Kailoun, a plant which grows in all the ſwamps near the rivers. The inhabitants uſe this as a cataplaſm in all boils to make them ſuppurate; and taken in decoctions, they imagine it produces ſweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtſchatka*, they uſe in decoctions for all pains and ſwellings of the legs. 3dly, Katunatch †, or wild roſemary, is not ſo ſtrong as in other parts. The inhabitants have thought it beneficial in the venereal diſeaſe, but in this are deceived. 4thly, The ſea oak ‖ is thrown out by the waves; and being boiled with the ſweet herb, a decoction of it is given in fluxes. 5thly, The ſea raſberry is given to women in labour, to promote the birth. 6thly, There is yet another ſea plant, called yachanga ‡, which the ſea throws out near to the *Kurilſkaya Lopatka*, reſembling the whale's beard. This the inhabitants uſe in cholic pains, infuſing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almoſt all the ſhore of
757 *Kamtſchatka*. This plant is made uſe of againſt pains in the back in the following manner:—They put the patient into a hut made exceedingly warm; and when he begins to ſweat profuſely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occaſion ſudden death: however from this practice they
137 generally obtain great relief. 8thly, The zgate †† muſt not
278 be omitted, whoſe dreadful qualities are but too well known
411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is ſqueezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venoſis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

root of this plant, and the wounds which they give are incurable unleſs the poiſon be ſucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and ſwells, and in two days the patient dies. The very largeſt whales when they have received a ſlight wound from ſuch a poiſoned weapon, cannot bear the ſea for any conſiderable time; but throwing themſelves upon the ſhore, expire moſt miſerably, with terrible groans and bellowing. 137 278 411

The following are very ſerviceable for cloathing, and other houſehold purpoſes. 137 285

There grows upon the ſea-ſhore a whitiſh high plant, resembling wheat. I have ſeen it at *Strelinimuiſe*, the palace below *St. Peterſbourg*, upon ſandy ground. Of this they make mats, which ſerve them as coverings and curtains; the beſt of theſe are made of different colours, with the beards of the whales ſplit very ſmall and dyed. They alſo make clokes of it, like the old *Ruſſian* milled clokes, ſmooth within, and rough without, which makes the rain run more eaſily off them. The prettieſt of this kind of work is their little bags and baſkets, in which the women keep their trinkets. Theſe are ſo neat, that one would take them to be made of ſplit canes; and they are ornamented with the hair of whales' beards and horſe-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fiſh or different herbs and roots, which they provide againſt the winter: beſides it ſerves alſo to thatch their houſes or huts. They mow it with a ſcythe, made out of the ſhoulder-blade of a whale; which they whet ſo well by grinding it upon a ſtone, that they bring it to a very good edge. 314 286

In the marſhes there is found a plant reſembling the cyperoides. This they dreſs with a double-toothed comb of bone, and uſe it to wrap their children in inſtead of ſhirts or ſwaddling cloaths, to keep them clean and ſweet. They alſo roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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137

A LIST *of some* PLANTS, BEASTS, FISHES, *and* BIRDS; *with their Names in the* English, Russian, Kamtschatka, Koratski, *and* Kurilski *Languages.*

PLANTS.

English	*Russian*	*Kamtschatka*	*Koratski*	*Kurilski*
The birch tree	Beresnick	Hehy	Lagane	
Poplar	Topsucka	Thilpisi	Yakal	
Willow	Vetsalnicka	Liamtche	Tekile	
Alder	Olchesnike	Sikite	Nikilieu	Assi
Service tree	Rebenike	Kaihine	Eloene	Kotunoni
Juniper	Mesheveinika	Kahaine	Valvakitche	Pakarpairwanamai
Cherry laurel	Tcholemasnika	Kalhame	Eloene	
Dog briar	Shipovnika	Kavasha	Pitctakachatche	Kopokane
Honeysuckle	Shimsode	Lushinika	Nitchivuy	Enamettam
Barberries	Boisrishnika	Horatsaune	Pitkitche	
Brambleberries	Morashka	Shiie	Etiette	Apoumenaipe
Wortleberries	Golubitsa	Ningule	Liagule	Enamucuta
Cranberries	Klisukva	Tchikuane	Emelkevina	Asitte
Bulberries	Brisusitou	Tchahauhe	Tiansane	Nipopkipe

BEASTS.

Sea calves	Tiulenne	Kolha	Memele	Retaftore
Sea beaver	Bahri	Kaiku	Kalaga	Rahku
Sea cat	Kotti	Tatistche	Tatatche	Ounepe
A fox	Lifotsa	Tchashisi	Yaivne	Kimutpe
Sables	Cobali	Kembiane	Kitighiane	Na
Ermines	Gorsostai	Doitchitche	Imahuhaka	Taanerume
A wolf	Volka	Kitaia	Eglinguue	Orgia
Bear	Medved	Kasha	Kainga	
Glutton	Rassamak	Tiimmi	Haeppi	These beasts are not known in the Kurilski islands
Marmotta	Evrashka	Ciredstche	Gilnak	
Elk	Oleni	Eluahappe	Lugaki	
Stone ram	Kammenoi barenu	Guadinadatthe	Kitipe	

FISHES.

A large kind of salmon	Tchavitche	Tchovnitche	Ewotche	Tchivirs
Red fish	Krasnoiriba	Kehivishe	Niovoai	Siitchiae
The humpback	Gorbusha	Koansutchi	Kalal	Siakipa
Turbot	Kambala	Sigifigh	Alpa	Tantaka
Lampreys	Minoghi	Kanaganshe	Unknown	Unknown
Smelts	Korouchi	Innahu		
Herring	Selsi	Neriner		
Skate	Skata	Kopashu	Kammiahacke	Kapashu
Cod fish	Freska	Battai	Unknown	Unknown
Whales	Kili	Dai	Junghi	Rika

BIRDS.

Great sea cormorant	Bolshoi tchaika	Atuma	Attume	Pongapiphe
Swan	Lebed	Matame	Kamtchan	
Geese	Goussed	Ksode	Geclesine	Kontape
A drake	Celesna	Baine	Geclchogatche	Bakariku
Stone ducks	Kammenia utki	Nikingike	Unknown	Vaiout
Widgeons	Gargari, Ashoui	Yovaiva		Cesse
Eagles	Orli	Selche	Tilmiti	Surgear
Hawkes	Saholi	Shishi	Tilmitil	
Partridges	Kuropatki	Euibtchitche	Enette	Niepoe
Crows	Voronni	Kaka	Tchautchavaola yelle	Pasheere
Magpies	Saroki	Kakitchertche	Unkitigin	Kakuk
Ravens	Voronitchernai	Hagulhak	Nimetta yelle	
Swallows	Lastotchki	Kainkutche	Kavalingek	Kuahan
Larks	Javoronki	Tchelaslai	Geatcheiere	Rikintchire
Cuckows	Kokashke	Koakoutchitche	Kaikuke	Kahkek
Snipes	Kuliki	Soakulutche	Tcheias	Etchikumama

Of

361 different buildings; the entrance into the fort is by a ſmall
563 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about
45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

The

The upper fort of *Kamtſchatka* was the firſt built, and for ſome years reckoned the principal, as the chief commiſſary lived there. It ſtands upon the left bank of the *Kamtſchatka*, near the mouth of the little *Kaly*, about 69 verſts from the riſe of the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſcheretſkoi* fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper fort, and ſtands upon the ſame ſide of the river, about 30 verſts

 from

from its mouth. The fort is a parallelogram made with paliſades; its breadth is 40, and its length 42 fathoms. In the fort is a church dedicated to the Virgin *Mary*, the office and magazine for the taxes, ſtores, and the commiſſary's houſe. Theſe are all built of larch wood, and much neater than in any other fort. Without the fort are 39 private houſes, beſides the publick houſe and diſtillery. The male inhabitants are 92, of all ranks.

This fort, with regard to the neceſſaries of life, may be reckoned preferable to any other. Here the inhabitants catch plenty of fiſh, which they dry and ſalt in ſufficient quantities for proviſion through the whole year: here they have wood enough, not only for building their houſes, but alſo for building ſhips, to which the river ſerves as an harbour; and by its proximity to the ſea they boil ſo much train oil and ſalt as to ſupply the other forts. Game is here ſo plenty, that the pooreſt Coſſack ſeldom dines without a ſwan, gooſe, or duck; and through the whole winter, in the ſprings, they catch freſh fiſh. Wild berries of all ſorts are here in great abundance, which the inhabitants lay up in ſtore for the winter, and which next to fiſh is the greateſt part of their ſuſtenance; and the beſt *Kamtſchatka* ſables are caught near the river *Tegbil*. All the goods which they get from the *Koreki*, ſuch as deer-ſkins, and even the fleſh of the deer itſelf, are cheaper here than any where elſe: beſides, this is a moſt fruitful ſoil, where they may cultivate corn of all ſorts. The only inconvenience that they have is, that both *Ruſſian* and *Chineſe* goods are dearer here than at any other fort, which is owing to their land-carriage from the *Bolſcheretſkoi Oſtrog* hither, which coſts four rubles a pood.

The fourth fort was built upon the bay of *Awatſcha*, in the year 1740; and inhabitants were brought hither from the upper and lower *Kamtſchatka* forts. The houſes are tolerably good, particularly thoſe which were built for the people of the *Kamtſchatka*

000 ber, and the 16 was ſpent in the hurry and buſtle which the laſt preparations generally occaſion. The reſt of our route, as far as Bolcheretſk, was to be upon the Bolchaia-reka. Ten ſmall boats, which properly ſpeaking, appeared to be merely trees ſcooped out in the ſhape of canoes, two and two laſhed together, ſerved as five floats for the conveyance of ourſelves and part of our effects. We were obliged to leave the greater part at Natchikin, on account of the impoſſibility of loading theſe floats with the whole, and there were no means of increaſing them. We had already collected all the canoes that were in the village, and even ſome of our ten had been brought from the oſtrog of Apatchin, to which we were going.

133/137 The 17, at break of day, we embarked upon theſe floats. Four Kamtſchadales, by means of long poles, conducted our rafts.

But

7:Lesseps T-3 (1787-88)1790 Kamchadal

133/137 But they were frequently obliged to place themſelves in the water, in order to haul them along; the depth of the river in ſome places being no more than one or two feet, 000 and in others leſs than ſix inches. Preſently one of our floats received an injury; it was preciſely that which was freighted with our baggage, and we were obliged to unlade every thing upon the bank, in order to refit it. We waited not, but preferred leaving it behind, in order to proceed on our route. At noon another accident, much more deplorable for men whoſe appetites began to be clamorous, occaſioned us a further delay. The float in which our cookery was embarked, ſunk all at once before our eyes. It will be ſuppoſed we did not ſee the loſs which threatened us, with indifferenc; we were eager to ſave the wreck of our proviſions; and for fear of a greater misfortune, we wiſely reſolved to dine before we proceeded any farther. Our dinner

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ner tended gradually to dispel our fears, and gave us courage to discharge the water which over-loaded our boats, and to resume our voyage. We had not advanced a werst, before we met two boats coming to our assistance from Apatchin. We sent them to the succour of the damaged float, and to supply the place of the boats which were unfit for service. As we continued to advance at the head of our embarkations, we at last entirely lost sight of them; but we met with nothing disastrous till the evening.

133/137 I observed that the Bolchaia-reka, in the windings which it continually made, ran nearly in the direction of east-north-east and west-south-west. Its current is very rapid; it appeared to me to flow at the rate of five knots an hour; in the meantime the stones and the shoals which we met with every instant, obstructed our passage

7:Lesseps T-3 (1787-88)1790 Kamchada

133 ſage to ſuch a degree, as to render the la-
137 bour of our conductors truly painful. They avoided them with aſtoniſhing addreſs, but as we approached nearer the mouth of the river, I obſerved with pleaſure that it became wider and more navigable. I was equally ſurpriſed to ſee it divide into I know not how many branches, which united again, after having watered a variety of little iſlands, of which ſome are covered with wood. The trees are every where very ſmall and very buſhy; we met with a conſiderable number growing here and there in the very river itſelf, which increaſe ſtill farther the difficulty of the navigation, and prove the careleſſneſs, I may ſay the ſloth, of theſe people. It never occurs to them to root out theſe trees, and thus open a more eaſy paſſage.

136 Different ſpecies of water-fowl, ſuch as ducks, plovers, goëlands, divers, and others,

divert

22: Guillemard T-2 (1882) 1886 Kamchadal

000 Before us lay the peaks of dazzling snow, and it seemed as though all Nature were hushed and worshipping at that throne of spotless purity.

Rest and purity then—the unattainable, in other words—in these lie the charm. The fairest tropic scene holds no deeper meanings such as these. Beauty of form there doubtless is, a far greater beauty perhaps than that of northern climes, but, after all, it is but soulless. The teeming life of a tropic forest, the marvellous wealth of vegetation, the reckless sacrifice of the weakest, produce

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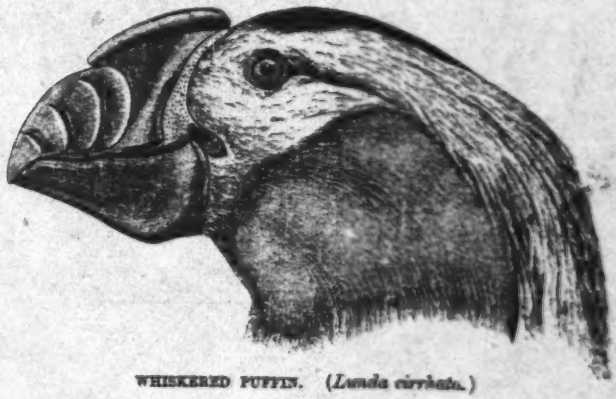

WHISKERED PUFFIN. (*Lunda cirrhata.*)

upon the mind the same effect as do the streets of a crowded city. No grandeur of "calm decay," no pathos of the changing seasons is here. It is a fierce struggle for existence, fatal to any except the most purely material thought.

133 The shores of Avatcha Bay extend to the traveller a more
137 smiling welcome than the iron-bound coast outside. Here, the lower hills slope gently down to beaches dotted with driftwood, or, covered with birch and heather, steeply overhang the sea. Behind they are backed by higher ranges clothed with undergrowth, and rising to the height of fifteen hundred feet or more. To the north-west only is this basin-like appearance broken, where the small

22: Guillemard T-2 (1882) 1886 Kamchadal

133 Paraminka and Avatcha rivers have formed a delta with innumer-
137 able mouths. Low ground also intervenes between the three great volcanoes and the bay, but the height of the mountains annihilates
136 the distance. Hardly a sign of human habitation is to be seen, but the calm surface of the water is broken by quantities of water-fowl, whose nesting-places are the steep rocks at the entrance of the bay. Most noticeable among them are the Whiskered Puffins (*Lunda cirrhata*), and the still quainter-looking Tufted Auks. The little

TUFTED AUK. (*Simorhynchus cristatellus.*)

133 village of Petropaulovsky is invisible, hidden behind a steep promontory forming the western boundary of its harbour. What an admirable harbour it is from a sailor's point of view can best be seen by a glance at the engraving. From the end of this promontory a shoal extends nearly to the other shore, but leaves a channel deep enough for ships of the largest draught. Within this again a sand-spit,—so straight, so narrow, and so regular in form, that it is hard to believe that it does not owe its existence to the hand of man,—runs out from the opposite shore to within a stone's throw
000 of the promontory. We steam in steadily towards the land; to an

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

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231 136 *Rien n'est sacré pour un sapeur.* Raw hides, boots, and even babies, it is said, occasionally vary his diet!

To our ship's crew Petropaulovsky appeared little less than a paradise. The bright sunny weather and clear cold nights were a pleasant change after the heat of the tropics, and the forecastle mess was furnished with many unaccustomed delicacies. The 136 harbour and rivers teemed with fish; periwinkles *à discretion* were 137 to be had for the picking, and milk and bilberries were abundant. The whiting and herrings were, however, left in comparative peace, owing to the ease with which salmon were to be obtained at the mouths of the Avatcha and Paraminka rivers. On one occasion no less than three hundred of these fish were obtained at one haul of the seine, and the crew occupied themselves in salting, smoking, 000 and otherwise preserving the spoil. Jack was in his element, and doubtless would not have objected to passing the rest of his life in such a fascinating spot. Our shooting excursions to various parts of the bay were much enjoyed by the boats' crews, and the forward part of the ship began ere long to be ornamented with bearskins that the men had obtained by purchase or barter from the natives. Meanwhile we had been making arrangements with the Ispravnik, and the individual I have before mentioned under the title of the King of Kamschatka, for the ponies that were necessary for the first part of our journey; but, as there was some delay in getting 133 together the requisite number, a party of us started to visit the hot springs of Kluchi,[1] which lie some few miles from the shore on the other side of the bay. Excepting during strong south-easterly winds, which send a somewhat heavy swell into the entrance, the passage across is generally pleasant enough even in small boats. Though blocked with ice in the winter, the bay is, we understood, but rarely frozen right across, although the harbour of Petropaulovsky is, of course, closed for some months. Landing in a bay north-west of the entrance to Tareinska Harbour, we passed through an extensive birch-forest, and emerged at length on the shores of a

[1] Kluchi, I believe, is the Russian word for springs.

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locomotion as their charges. At this rate of advance our journey's end seemed distant indeed. We pressed on, however, as well as we could, and crossed a small plain from which the base of the Avatchinska group of volcanoes was visible to our right. Their summits were hidden in thick mist, and the weather, which had hitherto been fine, now looked most threatening. Arriving at a small stream, Vodki and his two companions halted, and declaring that there was no water farther on, proceeded to unload the horses. This we soon put a stop to, and telling them that, water or no water, we had no intention whatever of camping for another hour or more, we resumed our journey. The scenery now changed, and we entered a gloomy birch-forest with much thick undergrowth. This was in places six or eight feet, or more, in height, and was composed of coarse grass and giant umbelliferæ, with an occasional blue monkshood, varied in the more open parts with large patches of yellowing bracken. Before long we reached another stream, and were thus enabled to prove the truth of our surmises; but it was not till some time later that we finally halted for the night, the horseboys being by this time scarcely in a condition to proceed farther. We were glad to pitch camp and get a rest, as it had already begun to rain. Before turning in we succeeded in finding Vodki's brandy bottle, but it was perfectly empty. The man had disposed of a pint or more of raw spirit since leaving the settlement!

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In this kind of travel movement is not very rapid for the first day or two until every one has shaken down to his work, and on the following morning we were nearly three hours in getting breakfast and striking camp. The horseboys were depressed and inclined to be penitent. If, like an old Kafir servant of mine, they estimated the amount of enjoyment of the previous night by the strength of the morning's headache, they ought, to all appearances, to have been well pleased. We had decided to leave Avatcha on our left, and to make for Stari-ostrog,[1] a small village a little higher up the Avatcha River, and forty versts from Petropaulovsky.

[1] The *ostrogs*, or small forts, were erected by the Russians in bygone days as a protection against the natives at the time of the first settlement of the country. The name now alone remains, all traces of fortification having long since disappeared.

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136 Avatcha River, and forty versts from Petropaulovsky. We passed
137 through the same monotonous forests of birch as before, which, like
487 those of other northern countries, seemed singularly devoid of animal life. An occasional coal tit, which from its note and habits appeared identical with the tame little freebooter of our own gardens, or the tapping of a woodpecker,[1] alone broke the almost death-like stillness which reigned around. We had struck a well-marked trail, and progressed in Indian file, the packhorses (tied in fours, each to the tail of the one in front) leading the way, and relieving the monotony by an occasional breakdown or a stampede.
231 Almost all these ponies are strong and well shaped, but from the ill-treatment they receive at the hands of their masters, have learned to bite, kick, and shy on all occasions, together with other accomplishments of like nature which were somewhat apt to dis-
000 turb our equilibrium. There was but one saddle among us, and the "Kamschatkan Peats," as we named the combination of pillow and pack-saddle which we used as a substitute, though comfortable enough when we ambled along quietly, were apt to become slightly insecure when, as a naval member of our party expressed it, we "made bad weather."

The path between Stari-ostrog and Petropaulovsky appears to be tolerably well-travelled, to judge from the frequency with which we came across the marks of old camping-grounds, but we met with no one on our way. It was afternoon when we reached the river, and crossing a small affluent, found ourselves opposite the village. We had ridden on ahead, and were hailing the natives for canoes in which to cross, when a tremendous clattering in our rear caused us to turn, and we beheld the cook's horse advancing in full stampede, but minus his rider. Beneath his belly a large canteen swung violently from side to side, half-open, and discharging a shower of tin cups, knives, forks, plates, tea and coffee kettles, and other articles of like nature in all directions. We retraced our steps sadly, picking up such articles as we could find, but

[1] *Picus tridactylus*, considered as a distinct species (*P. albidior*) by Dr. Stejneger.

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226 251 In company with our English-speaking friend we went to inspect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133 137 It was late in the afternoon before we were again *en route*, our course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usually exasperating

[Avacha--Analyst]

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000 stampede. These occurrences, though common enough during the earlier part of our journey, became less and less frequent as we advanced, and before we reached our destination had altogether ceased to trouble us. We did not regret it, for no amount of repetition accustomed us to them, and it needed an almost superhuman patience to take them philosophically. We were now passing along a fairly well-marked trail, and, a short time after we were once more in marching order, we met four miserably ragged and dirty natives who seemed to be moving house. They were mounted, and drove before them a couple of cows. We inquired if they had any furs for sale or barter, but they were unable to understand us, and thinking we wanted milk, produced a few drops of that liquid tied up in a small piece of the intestines of a recently-killed bear. This delicacy, however, we declined with thanks. A little later we came upon the new addition to our cavalcade for which we had arranged at Starostrog—three ponies, each of which was accompanied by her foal. We formed now a party of some size, composed of eleven men and twenty-six horses, and the playful gambols of the little foals, though somewhat provocative of stampedes, served to counteract the gloom of the monotonous birch-
137 forests through which we passed. The height of the undergrowth of grass and other coarse herbage was enormous; such, indeed, as I could not have conceived possible for annuals to attain in these northern climes. In many places it was two or three feet above our heads as we rode. There was but little game to be looked for, or at least to be easily obtained, among such rank vegetation, and we pressed on without delay, as our rate of progress since leaving Petropaulovsky had been anything but satisfactory.

000 Our new horseboy, though in other ways a great improvement on his fellows, was unluckily a somewhat sleepy individual, and signalised himself during the course of the afternoon by causing the most disastrous stampede we had yet experienced. The pack-horses, as I have already mentioned, were lashed together in strings of four, the leading animal carrying a horseboy in addition to his

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435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 On the morning of August 22d we came for the first time to a
137 *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our
132 course—for we were on what a native would doubtless call the
487 "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

22: Guillemard T-2 (1882) 1886 Kamchadal

136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 137 Our road, some time after leaving Narchiki, had led to the west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature
132 of northern landscapes, we put up several coveys of ptarmigan;
136 and on the outskirts of a small wood we obtained our first
231 Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

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CHAPTER VI.

KAMSCHATKA (*continued*).

Abundance of bears—Ptarmigan—The Palæarctic region—Valley of the Bolchereak—Arrive at the Kamschatka River—Dense growth of annuals—The sable—Methods of catching it—Puschina—Kamschatkan birds—Verglaski fishes the river—Kamschatkan salmon—The Tchervitchi—Krasna—Haiko—Garbusa—Kisutchi—Gultsi—Other salmon—Habits of bears when fishing—We arrive at Sherowmy.

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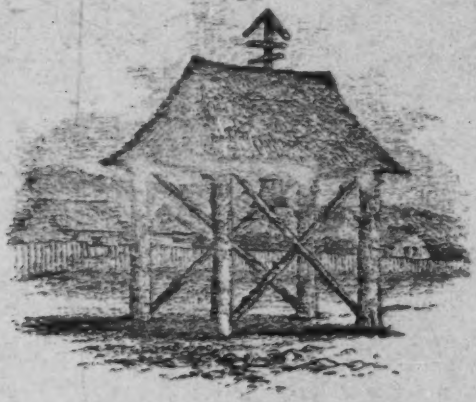
137 We left Gunal on the morning of August 27th. Our two days' rest had done us all good, and Cook's disabled leg, which had at one time caused us some anxiety, was sufficiently well to risk going on. The injured member had not prevented his superintending the making of some most excellent bilberry jam. We had killed a fatted calf, of which, after much haggling, we had become the possessors for the sum of twelve roubles; and the carcase had been duly converted into veal and a good supply of stock. From our saddles hung several couple of mallard, and the larder on the whole was in as satisfactory a condition as it well could be. We had woke to a heavy mist, which rendered even near objects distinguishable with difficulty, but it lifted gradually under the rays of a bright sun, and before we were well off, and had turned to catch the last glimpse of the beautiful scenery around our late camp, the day had become all that the most *exigeant* of travellers could desire. Under hot suns like these the signs of autumn appear with wonderful rapidity, and we noticed that the tints were distinctly brighter than they had been but three days before.

22: Guillemard T-2 (1882) 1886 Kamchadal

133/137 We passed two of the level seas of marshy ground that for lack of a better name I have hitherto called *tundras*. The term is, strictly speaking, applied only to the vast stretches of ground of this nature that are so wearisome to Siberian travellers. Here, however, the only difference lies in the size, and as we have no corresponding English word, I have preferred to retain the Russian name. The thick forests of birch were no longer to be seen, and the country, though still wooded, was more open, large clearings



BELFRY AT GUNAL.

being not infrequent. The familiar monkshood, too, whose spikes of flower are in Kamschatka snowy white, as well as of the ordinary shade of violet that our English gardens exhibit, had almost entirely disappeared, and we saw but little more of it during the rest of our journey. The number of bilberries was enormous, but the cranberry was much less abundant, and its berries as yet were hardly ripe.

Riding quietly along in advance of our party, we suddenly came almost upon the top of two very fine bears, with a young cub between them. We were unfortunately without our rifles at the time, and before we could get them the animals had made off,

22: Guillemard T-2 (1882) 1886 Kamchadal

133 greatly to our disgust; and, though we spent some time in following
137 them up, we did not succeed in getting sight of them again. They had doubtless got scent of us, and were far away. Bears are always much more disturbed by getting wind of human beings than by any noise the latter make, or even by their appearance; and the hunter, although his movements are by no means those of the stealthy-footed Malay, knows that unless he works to windward his trouble is in vain. The number of these creatures in Kamschatka must be enormous. Afanasi told us that there are hunters who have killed over four hundred in their lifetime, and we heard that at a little hamlet on the Bolcheresk River more than ninety had been shot and trapped during the summer. July, August, and September are the best months for them, as they haunt the river-banks at that season for the fish, and are in most excellent condition.

The heat at noon was nearly as great as it had been on the previous day, and the business of supplying our larder with ptarmigan for the many mouths we had to feed involved a very considerable amount of exertion; and, as we ploughed through the soft moss, sinking up to our knees at every step, "larding the lean earth as we walked along," it was difficult to realise that at night-
000 fall we should be back again in an Arctic climate. The birds were luckily tolerably abundant, and we had obtained a sufficient number on pitching camp for the night. Capercailzie apparently were rare. We had seen but few, and up to this period had only succeeded in obtaining one, and our game-birds were consequently limited to the Willow Grouse.

The Englishman travelling in Kamschatka who has reached his destination, not by the desert steppes of lonely Siberia, but by way of Ceylon and sweltering Singapore, where almost every bird he sees is unfamiliar to him, cannot fail to be struck, however unobservant he may be, with the resemblance of the avifauna of the new region in which he finds himself to that of his own country. He disturbs a Turnstone or a Golden Plover as he lands, perhaps,

000 having failed, kicked one of the packhorses violently in the belly while unloading it. The effect was excellent. The poor animal, who, like the Pope's mule in Daudet's charming little story, had many an old score to pay off, turned round and bit his aggressor so successfully in the face as to leave him with a portion of his cheek hanging down. Here we interfered to prevent reprisals, and while the conqueror was led off to a patch of the most succulent-looking grass we could find, Vodki retired to his tent to nurse his wound for the next two days.

133/137 Accustomed as we had become during the earlier part of our journey to the wonderfully dense growth of the annual herbage, especially in the birch-forests and in the vicinity of the rivers, I do not think we had ever seen it in more rank luxuriance than we found it here. Our camp was pitched on a little eminence two or three hundred yards from the river, but the latter would have been almost unapproachable had it not been for the numerous bear-tracks that led in every direction through the forest of grass. As it was, the vegetation rose three or four feet above our heads, and was in places so thick that we could never be sure that our next footstep would not precipitate us into one of the hidden streams with which 000 the marshy ground abounded. In such ground shooting is almost impossible, and the only plan is to lie up in concealment on the banks of the river, on the chance of a bear coming out in the neighbourhood to fish.

We spent the remaining two or three hours of daylight in this monotonous and chilling amusement, and rose wet and stiff with cold without any success having attended us. The bears had in all probability deserted this part for some other place where fish were more numerous, and the only recent spoor we saw was that of an otter, an animal that is apparently far from common in the peninsula.

136 The following morning, since there appeared to be no fish in the river, we put our rods together and tried a fly in Kamschatkan waters for the first time. Paradoxical as it may seem, a river of

22: Guillemard T-2 (1882) 1886 Kamchadal

000 resumed our journey down the river. We had hitherto only been able to buy one canoe, and in consequence were in need of four others with which to make our rafts. These they refused to sell us, but offered to lend them, together with men to take us on to Mashura, the nearest settlement, for fifty roubles! The silver rouble being nearly three and sixpence, and the distance only sixty versts—rather less than forty miles—we at once refused, regarding the demand merely as one of the common incidents of barghining, and expecting it very soon to be considerably reduced. We were rather astonished that there was no sign of anything of the kind, and after waiting some time we had ourselves to return to the charge. In vain we threw the Ispravnik at their heads: we had a discussion of an hour and a half's duration, which at last ended in our agreeing to pay forty roubles, but under protest. At the same time we informed them that we should lay the matter before the Ispravnik on our return to Petropaulovsky.

It was two or three hours after sunrise before we got fairly under way. The weather was gloomy and cold, but with the exception of one heavy shower, we escaped without much rain.
133 Shortly after leaving Melcova the character of the river scenery
137 changes. For the first time on our journey we noticed the pine and spruce, and welcomed them with pleasure, as a relief from the wearisome monotony of poplar, birch, and alder. Here and there curious mud cliffs bank in the stream; often eighty feet or more in height, and nearly perpendicular.[1] The men begged that we would not fire while passing under them, lest a landslip should occur; and apparently with reason, for the soil appears to be constantly crumbling away, and little cascades of dust poured unbrokenly from the face of the banks as we paddled beneath. In one place we noticed a chalybeate spring welling up close to the water's edge, while others of pure water seemed abundant at the base of these earthy cliffs.

[1] These banks of reddish marl, known by the name of *yar*, appear to be not uncommon in Siberia. The town of Krasnojarsk on the Yenisei is thus named from their existence in the vicinity.

22: Guillemard T-2 (1882) 1886 Kamchadal

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of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

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If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

22: Guillemard T-2 (1882) 1886 Kamchadal

000 early dawn, with the thermometer below freezing, struggling in an icy river with all one's furs on, but the unlucky bather was soon ashore, and a sharp rub-down at the camp-fire soon restored both his circulation and his equanimity. The day was once more bright and clear, and the distant peaks looked magnificent in the morning sun. As we drew nearer, the mountains opened out, and
133 the western slopes of Tolbatchinska no longer hiding Kojerevska, the latter volcano appeared, from this point of view at least, as a perfect cone of regular shape, which half concealed the equally regular and still higher peak of Kluchefskaya, the king of the volcanoes of Kamschatka. Other mountains too had come in view. To the north and west of Kluchi,[1] but in close proximity to it, the smoothly-rounded summit of Uskovska rose above the dark line of forest, and far away to the eastward two isolated and nameless cones of graceful shape appeared on the horizon, which, in spite of their eight or nine thousand feet, are recorded in no map.[2]

133 At this part of the river the conspicuous marl cliffs disappear,
137 and the pines are replaced by aspens, a tree of which we had
361 hitherto seen but little. Landing in the afternoon to take photographs and observations, we came upon quantities of the *cherunka* or wild cherry. The fruit is black, and of the size of a large black currant; very sweet, but with a peculiar sloe-like astringent after-taste. The delicious Scandinavian *moltebæer* we did not meet with, but our common raspberry and red currant are in some places plentiful. The latter fruit is, in our English gardens, scarcely worth eating, but in the wild state it is very sweet and palatable.

Eleven hours' steady paddling brought us, at 6 P.M., to three deserted balagans, without fish, and with nothing to indicate the presence of a human being save four canoes hauled high and dry upon the bank. We learnt that Tolbatchik, a village that we

[1] To the natives, with their love of contractions, the great mountain is thus invariably known.

[2] These we have since named Mount Gordon and Mount Herbert Stewart.

000 during our river journey nearly spoilt what was otherwise a very pleasant expedition.

We landed for a meridian altitude, and improvised an artificial horizon by means of a bucket of water. The banks were low and flat, and frequently intersected by muddy creeks, while the birches and firs had almost disappeared, giving place to the willow and wild cherry. I have rarely seen more impassable ground than that close to the river.[1] The coarse grass rose high around us, preventing the possibility of seeing anything—a condition which obtains in almost every part of the country; but an additional and far more effectual barrier to our progress existed in the shape of a thick tough brushwood which clothed the irregular ground with a network of small boughs, catching our feet firmly at every step. Later, at Cape Shipunsky on the south-east coast, we found the country even more impracticable. The bears, however, manage by their great weight to force themselves through this thick cover with little apparent difficulty. Just inside the forest, at a distance of six or eight feet from the river-bank, is a firmly-trodden path some two feet in width, made entirely by these animals; and as these paths are to be found without a break on either side of the river in its whole course through the forest country—a distance of about 500 miles—it will be understood why bears' skins do not command any very high price in the peninsula.

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The procuring of a sufficient quantity of duck for our daily needs became at this period a rather difficult matter, the main river being deserted by them for smaller streams and marshy pools in its vicinity. Sea-birds became more numerous; a tern (*Sterna longipennis*), two or three phaleropes, or the Red-throated and Black-throated Divers (*C. septentrionalis* and *C. arcticus*), were to be met with from time to time. We also shot a *Podiceps*, which seemed to be identical with our own Red-necked Grebe.[1] On the banks an

[1] According to Mr. Seebohm, the eastern form of *P. rubricollis* is conspicuous for its larger size, and especially for the greater length and stoutness of the bill; and the measurements of the above-mentioned specimens certainly bore this out.

[the Kamchatka River above Kojerevsky--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

000 last rays of the sun and flushed a pale pink, while at the lip of the crater a fleecy puff of smoke hovered for an instant as if in doubt, and then floated out a long thin streamer to the east. Around his shoulders hung a thick belt of cloud, gathering rapidly with the fast-approaching night, and beneath, slope after slope rose steadily up to meet the pyramid above. Kojerevska showed here and there a patch of glistening snow through rifts in the dense veil that hid him from our sight, and on the lake-like surface of the river below our little fleet of boats paddled merrily homewards to the rough and mournful cadences of a Kamschatkan love-song. Suddenly the flame of the first salute shot out from the other raft, the signal for a general fusillade. It was answered by a flash and a report from the village; and a little later we stepped ashore at Kluchi, and were welcomed heartily by the head-man and a little crowd of the inhabitants.

133/137/361 The morning of September 13th broke with hardly a cloud; and the view of the mountains, which now lay nearly due south of us, was so magnificent that I did not hesitate to devote one of my last plates to it. We crossed the river in a dug-out, and landed on a sand-bank near the opposite side. The stream is here six hundred yards in breadth, and forms a fitting foreground to the picture. Behind the village, whose weather-worn huts line the banks for nearly a quarter of a mile,—for Kluchi may be regarded almost as a city in this part of the world,—the even slopes of ruddy vegetation rise smoothly upwards, till, at the height of two
133 or three thousand feet, the snow is reached. The outline of the mighty volcano was as perfect here as before, and its exquisitely graceful slope as unbroken. Near the summit, on the side immediately facing us, a deep furrow, as yet untouched by the rays of the morning sun, showed the remains of some past eruption—a huge scar which the snows of many winters had done their best to obliterate. From the crater light puffs of smoke drifted slowly away to the east, far whiter than the snow which lay below, for on all sides, and especially near the summit, a sprinkling of ashes had

133 did not serve in any way to render it less depressing. The village
137 appeared nearly deserted, and as there was nothing to detain us we resumed our journey without loss of time. Before noon we arrived at the Tchoaki (lit. cheeks). These are narrows about seven miles in length where the river passes through a range of hills from two to three thousand feet in height. Both entrance and exit are very sharply defined, and the stream, which above and below is about eight or nine hundred yards broad, is here narrowed to between three and four hundred. The scenery is decidedly picturesque after the monotonous miles of willow-lined banks that weary the traveller's eye in the lower part of the Kamschatka; and we were reminded somewhat of the Iron Gates on the Danube, which geographically—I do not say geologically—the Tchoaki closely resemble. But the former are on a grander scale, and the river here, in spite of its contracted width, exhibits none of the tumultuous rush of water which makes the passage of the Iron Gates so difficult to a Danube steamer.

000 In the Tchoaki we met two or three canoes coming up from Nischni Kamschatka, and learnt from them that a schooner, painted white, and with a steam launch, was lying at Ust Kamschatka—the settlement at the mouth of the river. This was a piece of information which astonished us considerably. That there should be a ship of any kind there other than the *Marchesa* was most improbable, for, as they told us, she was the first vessel that had visited the river for three years. More improbable still was it that she should be a stranger when the fact of her being painted white was taken into consideration; while the existence of a steam launch seemed finally to put the matter beyond a doubt. But on the other hand, the fact that she was said to have arrived many days before was greatly against it, and as the bar was very shallow, it seemed hardly likely that the *Marchesa*, with her draught of fifteen feet, would be able to cross it. The natives could not give us any further information, as they had not seen the vessel, and we were left in a state of doubt which no amount of discussion helped to enlighten.

22: Guillemard T-2 (1882) 1886 Kamchadal

132 which, according to Jacof Ivanovitch, were to be found there in
133 abundance. A few years previously he had visited Betchevinskaya Bay, a deep inlet ten miles to the west of the cape, and had shot several; and since, according to his account, both anchorage and shelter were to be had—a not unimportant consideration on such a coast—we again steered southward, and keeping a good offing during the night, ran in to the land and picked up our position off Cape Shipunsky at daybreak. The coast is steep-to, and as we passed close to the fine cliffs and headlands which oppose the by no means tranquil Pacific, there lay the *neiges d'antan* bewailed of Maistre François Villon,—huge patches of last year's snow, choking the gullies down to the water's edge. That they should have remained throughout the hot summer in a south-east aspect was astonishing, and gave some idea of the severity of the climate in these latitudes, but the absence of the usual autumnal rains no doubt in great measure accounted for it.

133 Before reaching our anchorage just within the entrance of the
137 bay, we could distinctly make out small herds of the animals of which we were in search on the slopes of the cliffs, which here rose to a height of five or six hundred feet, precipitous in some places, but in others forming a sort of under-cliff covered with brushwood. We lost no time in settling our plan of action. Judging that the bighorn were confined to the promontory near which we had anchored, we resolved upon surrounding it, sending four guns to the top of the cliff, whose sea-face extended east and west for a distance of about three miles, and posting two others upon the beach below. The former, ascending in rear from the shores of the bay, reached their destinations with some difficulty, the undergrowth being so dense and strong that, but for the bear-paths with which it was cut up in all directions, it would have been impenetrable. At the edge of the cliff progression was somewhat easier, and on looking over we found ourselves in close proximity to the game.
000 Owing to the excitability of Jacof, who had got some distance ahead, we began the day in a manner I hardly like to recall. The

24: Lansdell-636 M-2 (1879) 1882 Kamchadal
116, 132, 137, 241, 286

" The valley watered by the Kamchatka is composed of fine mould, and has abundant natural productions- fir, birch, larch, poplar, willow, cedar, and juniper, and that of larger size than in the same latitude elsewhere in Asia. Raspberries, strawberries, whortleberries, currants, and cranberries abound; and flowers are seen in spring in almost tropical luxuriance. There is much grass in the lower lands, and Mr. Hill records an extraordinary phenomenon in a place he visited respecting the growth and preservation of potatoes. (1) There grows, likewise, a plant in the country called by

1. Admiral Ricord, a former governor of Kamchatka, imported potatoes for seed, and they were planted, but not taken up the following autumn. The next year, being found abundant and good, they were allowed to remain, where , dying and propagating continually, they yielded more than were locally required. Mr. Hill accounts for the phenomenon by the fact that neither damp nor frost could reach the potatoes; for though in winter the snow covers the surface of the frozen ground, yet so great in this vicinity is the internal volcanic heat that the earth is quite dry, and never frozen below a few inches from the surface.

the natives krapeva , from which they make a coarse but very durable cloth. It resembles our stinging -nettle, but is of larger growth and stronger fibre."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

27: Sauer--285-287 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 787

"On the 11th August [CMC: 1792] in the harbour of St. Peter and St. Paul, I observed a number of swallows flying about, apparently much [286] frightened. They were red breasted, a species never remembered to have been seen here; and the inhabitants immediately predicted some remarkable event; they were, however, only seen during the morning. The next morning, about five o'clock, we were alarmed by a violent shock of an earthquake, preceded by a rumbling noise, little short of thunder. The motion of the earth was undulatory for nearly the space of a minute. I was dressing myself, and was thrown down, which induced me to get out of the house as quickly as possible. The water in the bay was agitated like a boiling cauldron. The shock came from the north-east, and appeared to me to continue upwards of two minutes; but other gentlemen were of opinion that it did not last more than one. A sailor, one of the watchmen on board the ship, was thrown out of his hammock. At Paratounca it was more violent; the earth opened in many places, and water and sand were thrown up to a considerable height; all the buildings in the village were more or less damaged; one balagan was thrown down; some of the ovens (the only brick-work about the buildings) were also shaken in; and all the paintings, &c. in the church, except Captain Clerke's escutcheon, were thrown from their fastenings.

At Neizishni Kamtshatka the inhabitants were extremely terrified; nor could they explain whether the noise or the shock preceded. The situation of the town is on a neck of land formed by the discharge of the Raduga, a considerable river, into the Kamtshatka;

the bed of the former was dry, and the inhabitants ran across it toward the mountains. They, as well as the cattle, were thrown down; and the continuance of the trembling was, according to their account, near an hour; the earth opened in many places, and sunk considerably in some. The volcano Klut-[287]shefskoi emitted a vast column of black smoke; a noise like thunder seemed to issue from the bowels of the earth; the bells of the two churches rang violently; and the howling of the dogs, and screams of the people, surpassed all description, for the latter expected every moment to see the complete destruction of the town. But when the shock was over, the lost water of the river resumed its former channel, and the inhabitants returned to their dwellings. Not a single brick chimney or oven was left standing. The altar of one of the churches was separated from it about a foot, inclining a contrary way; and the greater part of the balagans were thrown down.

It is remarkable, that the inhabitants of the village at the foot of the burning mountain only heard the noise, and did not feel the shock; nor did it cross the mountains to the western shores of the peninsula."

27: Sauer--289-290 T-2 (1789-93) 1802 Kamchadal
116, 133, 137

"I shall commence my description at the southern extremity [CMC: of the Kamchatka Peninsula], which the Russians call the Lopatka, latitude 51°, longitude 156° 40', east from Greenwich; a low point of land, widening and rising gradually into mountains, barren and rocky, only producing here and there the creeping cedar and willow, to the extent of 40 miles. Birch trees then appear in the inconsiderable vallies, which are replete with lakes and runs of water rushing into the sea both east and west. A cluster of mountains occupy the whole space from the Lopatka to latitude 53° 5', where, in the neighbourhood of the village Malka, they divide into two branches, one trending north north-west; the other, which may be called the principal chain, leads north north-east. The place where the mountains separate is the highest land on the peninsula, and forms a barren stony desert of 65 miles in length, in a direction north and south, and from 3 to 15 in width, producing in detached spots brush-wood, willows, and a very few scattered and stunted birch-trees. It is replete with springs and [290] brooks; some of which uniting, and flowing south and south-west, form the Bistrea; while others, at only a few fathoms distance, take an opposite course, and are the sources of the river Kamtshatka. At the end of this desert, the mountains close within a mile or two, and a forest of birch-trees follows to the village Apoushinsk, where the river Kamtshatka is navigable for small boats to its discharge."

27: Sauer--290-291 T-2 (1789-93) 1802 Kamchadal
116, 132, 133, 137, 824

"The productions of nature [CMC: in central Kamchatka] are, a small kind of wild black cherry (tsheromka), in great abundance; the wood of which, being particularly hard, is used by the Kamtshadals for their guiding sticks to the sledges: the thickest trees that I have seen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary size, with birch, poplar, asp, and mountain-ash, clothe the mountains to their summit. The underwoods are, currant, dog-rose, hawthorn, alder, and bushes producing berries.

The climate is very different from that of the southern and northern parts of the peninsula, the valley being completely sheltered from the sea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The scenery is beautiful beyond description, [291] the river meandering through the midst of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every species of salmon in the season. This valley is 180 miles in length, frequently opening prospects of the Tolbatshinsk, a lofty double-headed mountain, constantly emitting an immense column of black smoke; while the second volcano, Klutshefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand."

27: Sauer--292 T-2 (1789-93) 1802 Kamchadal
116, 133, 137, 361, 563

"At Tolbalshinsk [CMC: mountain] the mountains are broken and barren; they encroach upon the valley, and considerably lessen its width. Storms are frequent between this volcano and that of Klutshefskoi, but never reach the neighbourhood of Milhovoi, and the trees are considerably less in size; but the country continues fertile as far as 30 versts north of the village Klutshefskoi, which is also a colony of Siberian peasants for the same purpose as those at Milkovoi, and who act in the same manner [CMC: see category 563, this source, p. 291]. Their proceedings are in some respects justifiable; for the magistracy at Neizshni exact the same payment from them as from the residentiary merchants. The court of justice conflicts of a burgo-master, four members, or rathmen, a secretary, writers, and watchmen; receiving a salary for the time they are in service: and frequently an expensive deputation is sent to Tigil, Bolshoiretsk, Virchni, and such places as are reported to by these pedlars; so that it is a matter of doubt with me, whether the culture of the earth would render any harvest sufficient to answer the payment of their claims. In some years they amount to 18 or 20 rubles, and in others half as much more."

27: Sauer--293 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The western coast of Kamtshatka is uniformly low and sandy, to the distance of about 25 to 30 miles inland, where the mountains commence. It produces only willow, alder, and mountain-ash, with some scattered patches of stunted birch-trees. The runs of water into the sea from the mountains, do not deserve the name of rivers (except the Bolshoia Reka), though they are all well stocked with fish from the sea in season, as trout and different species of salmon. They are generally at the distance of 15 to 20 miles from each other. The Itsha and Tigil are the most considerable; and neither of these have a course, with all the windings, of more than 100 miles.

The sea is shallow to a considerable distance; and the commanders of the transport vessels, who never lose sight of the exposed coast if they can help it, judge of their distance from land, in foggy weather, by the soundings, allowing a fathom for a mile; nor is there at the entrance into any of the rivers more than six feet at low water, with a considerable surf breaking on the sandy beach."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]; its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636.71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

27: Sauer--298 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137, 161

"Near the mouth of this harbour [CMC: of Tareinsk in Avacha Bay], on its north-west borders, is a valley forming a plain of about one mile and a half square, well wooded with good sized birch trees: a situation which Major Behm thought the most eligible of any hereabouts for a town. North and south are lofty mountains of easy ascent, covered with trees to their summit. The valley is bounded to the west by a fresh water lake of about 15 miles in circumference, well stocked with fish all the year through; while its borders abound in different kinds of berries, sarana, tsheromtsha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief source of the river generally known by the name of the Paratounca, of which I shall shortly give an account, as also of the other rivers. The remains of numerous villages in the vicinity of this lake strongly indicate the former popolousness of these parts; but they are at present overrun with bears, wolves, and hares."

27: Sauer--300-301 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137

"The plains of Avatsha, which bound the bay to the north-west, extend 18 miles from east to west, and 35 miles from north to south, producing at their northern extremity only a few patches of birch, poplar, and alders; all the rest are marshy grounds, overgrown with rushes and coarse high grass, with some spots of oziers and alders; the resort of myriads of water fowl, swans, geese, an amazing variety of the duck kind, and I believe every species of snipe. The river Avatsha runs in several branches through this plain. Towards its northern extremity are an immense number of cold springs, that form several basins of water, with small runs, uniting in a rivulet, which has a course towards the south of two miles, and empties inself into the river generally known by the name of the Paratounca, but which is called by the natives Ilmitsh; and the original Paratounca is the run from the springs above mentioned, opposite to the discharge of which the village of that name is situated. These springs do not [301] freeze in winter, during which season they are frequented by swans, geese, and several species of duck, particularly the safka, or duck with a melodious note, which has induced me to stile it musical. Here they find an abundance of food, and the pulpy root of an aquatic plant which, in its appearance, exactly resembles the olive, but is like the chesnut in flavour: I used it as a vegetable, and thought it better than any production of the gardens: the natives call it the sarana of the geese."

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 tatoes, cabbages, turnips and radishes; but the two
137 former never arrive at complete maturity, the one being waxy, and the other without a head. The famous antiscorbutic cheremsha, or wild garlick, abounds, as does a small but delicious root, somewhat resembling a sweet potatoe, called, in the language of the country, kimtchiga. There is also an abundance of wild berries in the neighbourhood of Tygil, yet their chief support is fish and rein-deer, of both which I partook at the hospitable table of
000 the commander of the fortress. At the expiration of four days I departed, having remained so long to recover my feet, which had been severely frost-bitten from wet.

I was accompanied by the commander of the transport lying in the Haven: he was what is termed a good, though a droll, fellow; and I was
133 gratified with his society. Our route lay at first
361 up the Tygil, which from its source to near the town runs through an interesting country. At midnight we reached Sedanka, a small village, containing six dwellings. From thence to Bolcheretzk is called the Tygil coast, which, generally speaking, is low and flat, the sea-coast being from thirty to forty miles from the mountains. The villages through which I had come were all of them upon the banks of some small streams, which, in most cases, rise in the mountains; but sometimes they emanate from the lakes, which are numerous. The rivers I do not apprehend to be

29:Cochrane T-2 (1821-22)1824 Kamchadal

133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to

133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga*; we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 and his dogs: nothing can exceed the devastation,
133 or be compared to it, but the effects of the wind on sandy deserts or mountains. I have known instances of people detained for twenty and thirty days in this tremendous pass, and it is seldom that it is crossed without a gale. And yet all this difficulty and danger might be obviated simply by the erection of crosses or mounts, as in the northern parts of Siberia, where I have seen in the distance of thirty or forty miles, a small mound of earth, with a white and black chequered cross placed at every one hundred and fifty yards.

133 The night was exceedingly cold, and the snow
137 and wind prevented our even enjoying the luxury of a cup of tea, for no fire could be lighted. Crossing a second toundra, desert, of seven miles wide, with infinite labour to the dogs as well as ourselves, we entered upon a most magnificent country. Lofty, straight, and stout firs lined the right of the valley, while the dwarfish larch, and alder, mixed with birch, stood upon the left in all their bandied and
000 crooked shapes. The contrast was extremely pleasing as we glided along the milky valleys at a rapid rate. Immediately upon clearing the desert the snow and wind ceased, and we hailed the return of fine cold weather. Not long after we overtook a caravan of nartes in great distress, having been detained ten days in the mountains by the weather. The dogs had been without food for three days, and were evidently in the last stage. In the early

000 sent holder, who, though I feel assured he appreciates it highly, yet would not retain it, should relations, or others more nearly concerned, express a desire to be possessed of so valuable a memorial.

133 From Kharchina the route lies over a large lake,
137 and thence over a fine open country, abounding
361 with some of the finest fir-trees I have ever seen, reaching to the height of sixty and eighty feet. At twenty miles we reached the ostrog of Kamennoy, on the right bank of the Kamtchatka, and, changing dogs, proceeded twelve miles farther to Kama-
136 kie over numerous lakes near the river. The coun-
361 try here abounds with red foxes, and is certainly one of the most picturesque parts of the Peninsula: the beautiful view of the Sopka, or Peak of Cliuchie, was hid in the clouds. I movedon to wards Nishney Kamtchatsk, also an antient capital in the Peninsula, a far more eligible place than the pre-
000 sent site. The weather had now become very mild, no less than 3° of heat of Reaumur. We made good about seven miles of our journey through very deep snow by the ensuing morning. For three hours we did not move forward more than one mile, a heavy fall of snow had taken place, and it was found impossible to proceed, owing to the extraordinary heat of the weather. No track nor scent offered to the dogs, otherwise I would have persisted in the prosecution of my journey. The drivers, however, with snow shoes actually sunk eighteen inches deep in the snow, and I was therefore com-

000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

29:Cochrane T-2 (1821-22)1824 Kamchadal

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

CHAPTER XI.

General Observations on the Peninsula of Kamtchatka.

000 KAMTCHATKA is a large peninsula of an elliptical figure, extending from the latitude of 59° to 51° N; the breadth is inconsiderable. A magnificent chain of mountains, with numerous sopkas or peaks, extend from north to south, the whole length of the peninsula, from which mountains numerous rivers, large and small, find their way into the ocean. Of these the Kamtchatka is the only navigable one, admitting vessels of one hundred tons as far as one hundred and fifty miles up the stream. All the rivers are, however, crowded with fish of superior flavour. There are also lakes of considerable size, and so numerous, that all intercourse between the several parts of the Peninsula is, during spring, summer and autumn, effectually precluded.

132 The productions of the country are few but va-
137 luable. There is an abundance of wood, as fit for ship-building as for general use. The finest timber is found on the banks of the Kamtchatka, Yelofka, and eastern coast, but the climate is such as to induce me to believe that neither corn nor vegetables will ever attain to great perfection; the soil in all seasons, at the depth of twenty-four to thirty inches, being frozen. Potatoes never ripen, cab-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 bages never come to a head, and peas only flower;
137 but turnips and radishes thrive amazingly. Grass of the most nutritious quality is found in the greatest abundance, as well in the numerous meadows as in the forests. It grows to the height of between five and six feet, and in some places three crops are produced within the year.

132 Winter may be said to occupy near one half of the year, spring and summer the other half. The winters are mild when compared to those of Siberia; the thermometer never descending, in the southern parts of the Peninsula, below 20° of Reaumur, and seldom below 12° and 15°. Spring is the most agreeable time, just when the leaves put forth, and it is then the fishing commences. The summer is the most disagreeable portion of the year, owing to the heavy rains and heavier fogs which come from the eternally snow-clad mountains. The greatest heat is in July, when the thermometer is at 27° and 28°. The snow lying upon the ground seven and eight months will sufficiently account for the want of cultivation, but indeed the remaining four can hardly be considered as equal to more than two months in other places; for the sun at St. Peter and St. Paul's has no effect upon the earth during more than four hours of the day, and from the immense height of the mountains, it is only from ten o'clock until two that any heat is felt.

251 This absence of heat, and these changes of climate, with the very heavy fogs, which account for

29:Cochrane.T-2(1821-22)1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

132 From this table it is seen that the climate of Tighil is much colder than that of Petropavlovsk and that the climate of Kluchevskoye, by its yearly and some of its monthly mean temperatures, is colder than that of Petropavlovsk, but by its summer temperature (May, June and July) it is warmer than that of Petropavlovsk.

Temperature of the soil. Monthly means, 1909.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Amplitude
Petropavlovsk:													
(1)	−10°5	−10°6	− 7°3	−0°5	8°3	14°5	17°6	15°6	10°9	.....	−4°7	−10°5	28°2
(2)	0.6	0.4	0.3	0.1	4.9	0.3	.....	13.4	10.9	.....	1.9	0.9	13.3
(3)	1.9	1.6	1.4	0.9	3.1	6.5	.....	12.1	10.4	.....	3.6	2.4	11.2
(4)	3.5	3.4	3.0	2.6	1.6	2.7	.....	6.3	7.1	.....	5.3	4.4	5.5
Kluchevskoye:													
(1)	−15.1	−17.3	−12.3	−2.4	10.2	15.6	19.3	15.9	.....	.....	−5.3	−19.3	36.6
(2)	− 9.5	−10.3	− 7.8	−3.1	3.5	9.3	12.8	12.4	.....	.....	−3.0	−10.4	23.2
(3)	− 1.2	− 2.6	− 3.8	−2.3	−0.8	0.0	3.0	4.0	.....	.....	1.7	0.1	6.8
(4)	1.4	1.0	0.7	0.5	0.4	0.4	0.4	0.4	.....	.....	2.7	2.1	3.3
Tighil:													
(1)	−15.3	−20.3	−14.0	−2.8	6.3	13.0	15.7	12.3	8.4	1.7	−6.1	−15.6	36.5
(2)	−11.9	−14.7	−12.0	−3.9	1.6	6.9	10.6	10.7	8.1	2.7	0.5	0.4	25.4
(3)	− 3.1	− 6.2	− 6.9	−4.4	−0.3	0.0	1.1	4.0	3.1	3.0	0.9	0.3	12.0
(4)	0.4	0.0	− 0.2	−0.9	−0.6	−0.2	−0.2	−0.2	0.0	0.3	0.3	0.2	1.2

(1) means on the surface; (2) means 0.25 meter deep; (3) means 1.0 meter deep; (4) means 2.0 meter deep.

This table is compiled from the numerous data on this subject by Vlasov, in order to show what time of the year may be regarded as the most favorable for making excavations in Kamchatka. In Petropavlovsk from May to September inclusive; in Kluchevskoye from July to September; in Tighil in August and September, and even in these two months we meet the freezing point at the depth of two meters. My own experience in that region gave still less favorable results. While digging on June 11 on the bank of Kulki River, a tributary of Tighil River, not far from the village Tighil, I met frozen soil at the depth of one foot and down. According to Vlasov only at the depth of more than 1 meter (3.28 feet) is the soil in Tighil frozen in that month.

SOMATOLOGY

144 The present Kamchadal have become mixed with Russian settlers and many
177 have lost their former Koryak-like appearance, even in places where officially no Russians are recorded. The same may be said of the inhabitants of the southern villages, Yavino and Golyghino, who in former times might have been physically influenced by the Kurilians (i. e., the Northern Ainos). The Kurilians had intercourse with the Southern Kamchadal, and some Kurilians had settlements on the southern extremity of the Kamchatka Peninsula.

● 141 The measurements of Kamchadal taken by Mrs. Jochelson show that the Russian metisation influenced very little the physical character of the Kamchadal. 158 men and 170 women were measured. The following table gives some of the measurements and indices.

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,557 mm.	5.4	1,495 mm.	4.6
Length of head	188 mm.	6.6	183 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic-facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kurll Lake (see p. 62), but it was not in good condition for measurements.

[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

L 144 features. This is to be expected if one takes into account the fact that the functionally independent traits of the Mongoloid stock were formed at different times and in different, though adjacent and even mutually overlapping areas.

soft, though straight hair, and also by their white skin, which is accompanied by a certain amount of depigmentization of eyes and of hair.

Ko 144 141 The Reindeer Koryak of the Penzhina River basin are hardly distinguished from the Reindeer Chukchee. Among them we frequently encounter epicanthus and many broad noses with horizontally situated nostrils and with developed nasal wings. Their faces are of a moderate [5] height. It is only their head index which is lower than that of the Reindeer Chukchee. The Reindeer Koryak of Kamchatka are characterized by a more sharply defined nose and by a lesser frequency of the epicanthus. However, the horizontal position of nostrils and a marked development of nasal wings is encountered among them approximately as frequently as among the Penzhina nomads and the Reindeer Chukchee. These traits of the Reindeer Chukchee and of the Koryak are suprisingly uniform between Kolyma and the Chukot Peninsula on the one hand and the center of Kamchatka on the other.

In our further exposition the prevailing type of the Reindeer Chukchee and of the Koryak will be referred to briefly as the Kamchatka type. It is true that the distribution of this type extends beyond the boundaries of the peninsula, but so does--in connection with the administrative divisions--the name "Kamchatka." Moreover, we frequently encounter representatives of the Kamchatka type in the north of the peninsula.

Ko 141 144 Because of the brevity of description and the contradictions in the data contained in the scientific literature, below we shall describe the traits of the Kamchatka type.

Ka 141 144 In covered places the color of the skin is white or swarthy (Nos. 7-13 of the Lushan scale), the face is easily tanned reaching No. 25. The eyes of almost all the representatives of this type are dark; the hair is black, but more frequently with a tincture of brown (No. 4 of the Fisher scale). The hair is straight and moderately hard. The tertiary hair covering on the body and the face is small. One meets, however, moustaches. Eyebrows are of moderate growth. The face is flat, but with less developed cheekbones than, for example,

Ko among the Lamut. The size of the face is average. Among
141 males the morphological height of the lower edge of brows is
144 128 millimeters, and the zygomatic diameter is 145 millimeters. The lower jaw is broad, especially in comparison
Ka with the moderate breadth of the cheekbones. The nose is
141 moderately or weakly defined, but much more strongly than
144 it is among the Lamut. Its breadth among the males of middle age is most frequently 38-39 millimeters. One frequently encounters a transverse position of the nostrils and a marked development of nasal wings. The frequency of the concave shape of the nasal profile is greater than that of the convex shape, but the prevailing type of nose is straight. The tip and the base of the nose are horizontal, and less frequently--upturned. Among the middle-aged men the epicanthus is encountered in 40-60 per cent of cases, the fold of the eyelid is moderately developed, the position of the eye slit is more frequently horizontal, and the eye opening is narrow or average. The upper lip is more often high and always forward. The lips are of moderate thickness, but are relatively thicker than the lips of the Lamut. The head is moderately brachycephalic (80-83), the forehead is more frequently straight with weakly or moderately developed supraorbital arches. The length of the male body is on the average 158-160 centimeters.

Ko The coastal Koryak of western Kamchatka turned out to be
144 anthropologically heterogeneous. The Rekinnikovsk group
141 (on the western side of the isthmus) is a fairly characteristic representative of the Kamchatka type. The Penzhina and the Kamchatka (Palana) proper coastal Koryak have the traits which differ from those of the Reindeer Koryak in the same direction in which the traits of the coastal Chukchee differ from those of the Reindeer Chukchee. Their nose is broader and more clearly defined. The horizontal position of the nostrils and the marked development of nasal wings is encountered much less frequently. The hair is much stiffer and the bluish-black tinge (No. 27 of the Fisher scale) is encountered more frequently. The beard is more pronounced. All these are "Eskimoid" peculiarities. However, the height of the face is noticeably greater only among the Penzhina coastal Koryak as compared to the height of the face of their nomadic fellow tribesmen. The concave shape of the nasal profile continues to prevail over the convex, the epicanthus is encountered just as frequently as among the Reindeer tribesmen, although the eyelid folds are somewhat less developed.

Ka our attention to tracing the existence of such similarities be-
144 tween the former type and the peoples who live in those parts of Asia lying beyond our boundaries. Resembling the Kamchatka type, combinations of a broad nose with a small size of the face are encountered in South China, Indo-China, Indonesia, on the Philippines and Formosa, and partly in Japan. However, because of the absence of data collected by the same method of observation, the comparison of the Kamchatka type with the south Asiatic Mongoloids becomes an extremely difficult problem.

000 One hundred and twenty-two male Korean inhabitants of the northern provinces of Korea, studied by me with the special purpose of making this comparison, turned out to be more closely related to the Reindeer Koryak and the Chukchee than to the Lamut and the Buryat. The average rating of the incline of their nostrils is 1.71, the protrusion of nasal wings--2.09. A considerable frequency of brown shades of skin coloring (55 percent of No. 10 and darker), moderately developed cheekbones, and small facial height (131 millimeters)--all these traits make for a greater similarity of the Korean and the Kamchatka types, even though this similarity is far from being complete. Specifically, the mandible diameter of the Koreans is not large (112 millimeters), the convex shape of the nasal profile is met more [Tables 1 and 2 on pp. 10-15 and part of pages 16-17 of the original text] [16] frequently than the concave shape. (2). However, from the point of view of racial com-

2. Scientific literature contains indications of the considerable breadth of the lower jaw of the aborigines of Burma.

position the Korean type evidently contains a north Chinese element, so that it cannot be looked upon as a characteristic representative of the south Asiatic Mongoloids.

Ka The difficulties that naturally arise in the course of the at-
141 tempts to organize large-scale anthropological research in
121 southeastern Asia compel us to shift our attention to the
114 craniological materials, especially since scientific literature contains good descriptions of the south Asiatic series. Unfortunately our museums are completely lacking in skulls
C which could be regarded as belonging to the representatives of
[764] the Kamchatka type. The custom of burning corpses, prevail-
Ko ing among the Koryak and among some Chukchee, prevents the
[764] collecting of such skulls. Nevertheless, a specific task of

Ka gathering skulls somewhere in the area of the Chaun Bay must
141 lead to fruitful results and may be regarded as one of the next
121 tasks of our study.
114 3. Finally, we should not forget that the conclusion that there exists a profound anthropological difference between the Paleo-Asiatics and the American Indians has been made on the basis of very superficial scholarly ideas about the racial peculiarities of the native population of North America. Many peoples of North America (for example, the Northern Athabascan Indians) have generally remained uninvestigated and the scientific data available with regard to other peoples are confined in most cases to a few measurements and to the most sketchy kind of description. The existing craniometric data, insofar as they lack the most essential measurements, such as those of the nasal profile and of the face as a whole, are completely inadequate. It follows, therefore, that we should undertake special projects of studying craniological collections of the American museums.

Ka 4. Paleoanthropology of Japan may provide important leads
174 to the study of the possible migration routes via islands into Kamchatka. If it is true that the ancient population of Japan was of the Ainu race, the route via the Kurile Islands is excluded in the case of both the Eskimo and the Kamchatka types. (3)

3. If we shall regard the Ainu type as an original Proto-Mongoloid form--a hypothesis which, though improbable, cannot yet be discarded.

[17] However, the paleoanthropology of Japan is so poorly developed (in spite of the relative abundance of material) that the hypothesis presuming a very ancient character of the Mongoloid elements encountered on the territory of Japan, and holding that at least one of the population types which inhabit Kamchatka may have penetrated there via the Kurile Islands may not be regarded as finally disproven.

000 As a result, the organization of the exploration of paleo-anthropological materials contained in the Japanese museums is also one of the next tasks of our future study.

5. In studying the problem of the continental migration route along the Okhotsk seaboard, we must define more accurately the outline of the areal [basic unit in biogeography] of the Eskimo type, which seems to skirt the northeast of Asia. With this purpose in mind, we shall in the nearest future investigate

31: Debets--16 D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C 141 142
L 141 142
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Сводка важнейших средних

1 Группы / 4 Признаки	2 Эскимосы				3 Чукчи береговые			
	5 диомидовские	6 наукенские	7 юго-восточные (унгазинские и сериненские)	8 суммарно	9 увеленско-анкилевские	10 восточные (беринго-морские)	11 северные	8 суммарно
29 Число исследованных	25	66	100	191	22	82	86	190
30 В том числе, в %:								
31 20—24 г.	32.0	27.2	20.0	24.1	18.1	26.8	26.7	25.8
32 25—39 л.	36.0	47.0	56.0	50.3	63.7	47.6	51.2	51.0
33 40—60 л.	32.0	25.8	24.0	25.6	18.1	25.6	22.1	23.2
34 Длина тела	1653	1627	1615	1625	1636	1639	1617	1629
35 Продольный диаметр	193.3	191.3	189.0	190.3	190.3	190.9	189.2	190.1
36 Поперечный диаметр	153.3	155.8	154.1	154.6	153.2	154.4	154.4	154.3
37 Головной указатель	79.5	81.6	(81.5)	(81.2)	(80.6)	(80.9)	(81.6)	(81.2)
38 Наклон лба (1—3; 1 — сильно наклонный)	2.36	2.36	2.23	2.29	2.59	2.62	2.53	2.58
39 Надбровье (1—4)	1.36	1.39	1.50	1.45	1.45	1.32	1.23	1.30
40 Морфологическая высота лица (от нижнего края бровей)	135.9	134.3	137.5	136.2	132.0	136.8	134.4	135.1
41 Скуловой диаметр	147.6	149.5	147.9	148.4	144.5	148.5	147.0	147.4
42 Нижнечелюстной диаметр	117.2	116.8	119.6	118.3	116.4	118.9	117.6	118.0
43 Горизонтальная профилировка лица (1—3)	1.08	1.00	1.11	1.07	1.00	1.04	1.05	1.04
44 Выступание скул (1—3; 1—сильное)	—	—	—	—	—	—	—	—
45 Выступание подбородка (0—3; 0—отрицательный к плоскости нижней челюсти)	1.74	—	1.74	1.74	1.60	1.59	1.89	1.78
46 Высота носа от нижнего края бровей	61.3	61.3	62.6	62.0	59.7	61.6	60.7	61.0
47 Высота носа от переносья	54.2	53.4	55.4	54.6	52.5	54.2	52.8	53.4
48 Ширина носа	37.0	37.6	37.7	37.6	37.1	37.8	37.7	37.7
49 Носовой указатель от нижнего края бровей	60.7	61.7	(60.2)	(60.6)	(62.1)	(61.3)	(62.0)	(61.8)
50 Носовой указатель от переносья	69.2	70.6	(68.0)	(68.8)	(70.6)	(69.7)	(71.4)	(70.5)
51 Высота переносья (1—3)	1.64	1.42	1.71	1.60	1.55	1.49	1.37	1.44
52 Поперечный профиль спинки носа (1—3)	2.32	2.06	2.03	2.08	1.77	1.98	1.75	1.84

Key to table on pp. 20 and 21

31: Debets — 17D-5 (1947) 1949

Chukchee
Tungus :Lamut
Koryak
Kamchadal

C 141 142
Table I
Таблица I
Ł 141 142
Ko 141 142
Ka 141 142

в частот. Мужчины

Чукчи оленные (чаучу) 12		Коряки оленные (чаучувены) 13		Коряки береговые (мымлянцы и раннженцы) 14			23	24	25	Ламуты 15				27	28
Чукотского п-ова 16	анюйские 17	пенжинские 18	камчатские 19	раннинские 20	пенжинские (камнско-капские) 21	поленские 22	Ительмены	«Камчадалы»	Русские старожилы Камчатки	анюйские 17	анадырско-пенжинские 26	камчатские 19	сумнарские 8	Буряты аларские	Корейцы северные
96	80	50	64	54	73	72	89	90	100	27	47	57	13	250	122
22.9	26.2	30.0	26.6	20.4	30.2	19.4	20.2	21.1	21.0	14.8	34.0	15.8	22.1	22.8	23.0
49.0	47.5	42.0	45.3	61.1	53.5	51.4	50.6	36.7	45.0	63.0	44.7	43.9	48.1	44.0	54.0
28.1	26.2	28.0	23.1	18.5	16.4	29.2	29.2	42.2	34.0	22.2	21.3	40.3	29.8	33.2	23.0
1617	1588	1586	1591	1582	1617	1617	1627	1636	1648	1593	1607	1608	1604	1630	1628
188.7	188.7	190.8	192.4	190.3	194.2	193.2	193.4	192.8	192.3	195.8	193.9	194.5	194.6	192.8	183.1
153.7	156.5	152.7	152.3	151.6	151.2	149.6	152.4	151.7	151.0	155.4	154.4	154.5	154.6	157.8	154.4
(81.5)	83.0	(80.0)	(79.2)	(79.6)	(77.9)	(77.4)	(78.8)	(78.6)	(78.5)	(79.4)	(79.6)	(79.4)	(79.5)	81.9	(84.3)
2.74	2.56	2.54	2.63	2.65	2.53	2.80	2.64	2.59	2.35	2.58	2.26	2.19	2.29	2.61	2.70
1.18	1.21	1.32	1.28	1.26	1.27	1.11	1.17	1.29	1.53	1.19	1.32	1.47	1.36	1.26	1.24
132.1	128.6	128.0	128.0	125.7	133.0	128.4	130.0	130.4	130.6	136.4	135.4	133.9	135.0	135.9	131.9
146.3	147.7	145.4	144.5	144.6	145.1	143.3	144.3	142.7	141.9	146.6	148.2	147.3	147.5	149.8	143.9
117.2	115.6	116.6	118.4	120.3	119.4	119.4	120.3	117.5	114.9	115.8	116.8	117.3	116.8	118.2	112.1
1.05	1.08	1.06	1.11	1.04	1.03	1.08	1.20	1.40	1.98	1.00	1.00	1.02	1.01	1.05	1.05
—	—	1.86	1.89	1.87	1.92	1.74	1.89	1.91	2.14	—	1.46	1.40	1.43	1.70	1.76
2.32	—	2.21	2.18	2.00	1.78	1.78	1.75	2.04	2.23	—	2.24	2.02	2.12	1.93	1.72
59.2	58.4	58.2	58.8	56.6	61.1	56.4	57.4	57.8	57.9	63.0	61.3	62.4	62.1	63.5	58.9
51.8	51.6	50.4	50.8	48.6	51.5	50.1	51.7	52.5	53.6	52.0	49.5	53.1	51.6	53.7	51.4
38.7	38.8	37.9	37.6	37.5	36.4	36.8	37.2	36.5	35.9	38.0	35.3	36.1	36.2	36.5	37.3
(65.4)	67.1	(65.1)	(63.9)	(66.2)	(59.5)	(65.2)	(64.7)	(63.1)	(61.9)	(60.3)	(57.5)	(57.8)	(58.3)	58.0	(63.2)
(74.6)	75.7	(75.2)	(74.0)	(77.2)	(70.6)	(73.5)	(71.9)	(69.5)	(67.0)	(73.0)	(71.2)	(68.0)	(70.1)	68.3	(72.5)
1.39	1.31	1.29	1.44	1.32	1.60	1.56	1.76	1.88	2.34	1.19	1.07	1.18	1.14	1.42	1.16
1.69	1.70	1.76	2.08	1.76	1.92	2.02	2.10	2.12	2.64	1.61	1.35	1.79	1.59	1.71	1.88

Key to table on pp. 20 and 21

31: Debets-18 D-5 (1947) 1949

Chukchee
Tungus : Lamut
Koryak
Kamchadal

Table I.

C 141 142
L 141 142
Ko 141 142
Ka 141 142

1 Группы / 4 Признаки	2 Эскимосы: 5 диомидские	6 якутские	7 нго-наступ-ные (унгазикские и сереникские)	8 суммарно	3 Чукчи береговые: 9 уреленско-Дежневские	10 восточные (берингово-морские)	11 северные	8 суммарно
53 Спинка носа								
54 Вогнутая, %	8.0	12.1	10.2	10.6	31.8	23.2	29.4	27.0
55 Прямая, %	52.0	63.7	41.9	50.7	54.5	41.4	58.8	50.8
56 Извилистая, %	20.0	12.1	20.4	17.5	9.1	25.6	8.2	15.9
57 Выпуклая, %	20.0	12.1	27.5	21.2	4.6	9.8	3.5	6.3
58 Кончик носа (1—3; 1—поднятый)	1.92	1.71	1.79	1.78	1.73	1.72	1.81	1.75
59 Положение осей ноздрей (1—3; 1—поперечное)	2.00	1.89	2.00	1.96	2.05	1.84	1.79	1.84
60 Выраженность крыльевых борозд (1—3; 1—слабая)	1.72	1.78	1.85	1.82	2.00	1.66	1.78	1.75
61 Выступание крыльев носа (1—3; 1—слабое)	1.76	1.90	2.06	1.97	2.05	1.84	1.78	1.84
62 Профиль верхней губы (1—3; 1—прохейлия)	1.44	1.24	1.24	1.27	1.36	1.21	1.19	1.22
63 Высота кожной части верхней губы	19.0	18.1	18.7	18.5	18.1	18.2	18.5	18.4
64 Ширина рта	55.4	56.4	56.6	56.4	57.2	55.9	56.1	56.1
65 «Толщина» обеих губ	19.0	17.9	18.7	18.5	17.6	19.5	18.9	19.0
66 Мочка уха (1—3; 1—приросшая)	2.12	2.33	2.64	2.47	1.82	2.14	2.12	2.10
67 Ширина глазной щели (1—3; 1—узкая)	—	—	—	—	—	—	—	—
68 Наклон осей глаз (1—3; 3—наружный угол выше)	—	—	—	—	—	—	—	—
69 Эпикантус, %	33.3	42.4	28.3	33.9	27.3	64.1	61.2	58.5
70 Складка века (0—3)								
71 Внутренняя часть (*p*)	1.13	1.47	1.42	1.39	1.18	1.70	1.94	1.75
72 Средняя часть (*m*)	1.25	1.56	1.51	1.49	1.18	1.74	2.02	1.81
73 Наружная часть (*d*)	1.25	1.52	1.46	1.45	1.18	1.73	1.94	1.76
74 Смуглая кожа (внутр. поверхн. плеча) № 10 и темнее, %	84.0	40.0	64.5	58.5	83.4	65.7	74.6	71.1
75 Темные глаза, %	100.0	92.4	96.0	95.3	86.4	96.4	93.0	93.7
76 Черные волосы (№ 27), %	82.5	83.6	65.1	73.8	65.0	55.3	40.0	49.7
77 Прямые жесткие волосы, %	95.7	89.8	63.2	80.2	69.2	74.7	56.8	66.5
78 Волнистые волосы, %	4.3	2.0	8.1	4.9	7.7	8.4	9.4	8.7
79 Рост бороды (1—5) у лиц старше 25 л.	1.53	1.56	1.68	1.62	1.33	1.35	1.19	1.28
80 Рост бровей (1—3)	2.44	1.95	1.94	2.01	2.14	2.19	2.11	2.14

Key to table on pp. 20 and 21

31: Debets-19 D-5 (1947) 1949

Chukchee
Tungus
Koryak
Kamchadal

Table 1. (Continued)
Таблица 1 (продолжение)

Чукчи оленные (чаучу) 12		Коряки оленные (чаучу-вены) 13		Коряки береговые (имымлаины и ремкенны) 14			23	24	25	Ламуты 15				27	28
Чукотского п-ова 16	анадырские 17	пенжинские 18	камчатские 19	рекинникские 20	пенжинские (пакинско-утвлес ие) 21	пахачинские 22	Ительмены	«Камчадалы»	Русские старожилы Камчатки	анюйские 17	анадырско-пенжинские 26	камчатские 27	сумма, по 8	Буряты аларские	Корейцы северные
26.0	33.8	24.5	17.2	38.9	16.4	33.3	22.5	15.6	6.0	7.7	32.6	12.5	18.8	6.4	10.7
53.1	48.7	61.2	54.7	46.3	54.8	57.0	66.3	68.9	72.0	76.9	60.9	64.3	65.6	69.1	59.8
13.5	10.0	4.1	15.6	11.1	20.6	9.7	5.6	5.5	11.0	7.7	4.3	7.1	6.2	12.1	16.4
7.3	7.5	10.2	12.5	3.7	8.2	0.0	5.6	10.0	11.0	7.7	2.2	16.1	9.4	12.4	13.1
1.70	1.63	1.92	1.97	1.74	1.56	1.42	1.63	1.72	1.77	1.65	1.26	1.68	1.52	1.53	1.68
1.61	1.63	1.63	1.66	1.67	1.92	2.01	2.08	2.09	2.33	1.73	1.94	1.89	1.88	1.97	1.71
2.13	2.20	2.29	2.00	2.24	2.00	1.74	1.57	1.58	1.64	1.73	1.57	1.64	1.63	1.60	1.62
2.24	—	2.35	2.31	2.46	2.14	2.19	1.89	1.90	1.87	—	1.62	1.93	1.80	1.75	2.09
1.20	1.09	1.04	1.25	1.08	1.17	1.28	1.46	1.61	1.82	1.23	1.00	1.06	1.07	1.13	1.11
17.8	18.3	17.5	17.5	17.6	18.7	18.3	18.5	18.4	17.8	19.1	19.3	18.4	18.9	18.2	16.1
56.9	56.7	53.9	53.1	54.3	51.9	52.2	51.2	52.4	50.8	54.2	51.1	52.7	52.4	51.4	48.7
18.3	18.0	18.0	14.7	17.6	16.5	17.2	17.5	16.1	14.3	15.3	16.3	13.9	15.1	18.1	19.4
2.39	2.44	2.04	1.78	1.74	1.90	1.93	1.88	2.09	2.32	2.11	2.19	2.08	2.13	2.04	1.57
—	—	1.59	1.66	1.79	1.78	1.85	1.93	1.93	2.10	—	1.55	1.57	1.56	1.80	1.66
—	—	2.18	2.32	2.21	2.28	2.16	2.25	2.28	2.05	—	2.60	2.45	2.51	2.52	2.30
60.4	59.0	51.0	38.8	51.9	51.4	48.6	31.5	20.2	4.0	77.7	84.5	66.0	75.0	54.4	67.4
2.08	2.03	1.84	1.73	1.73	1.69	1.51	1.00	1.12	0.67	2.19	2.64	2.61	2.53	1.99	2.21
2.27	2.14	2.08	1.82	1.79	1.71	1.69	1.40	1.43	1.12	2.30	2.62	2.66	2.57	2.25	2.20
2.23	2.14	1.94	1.77	1.79	1.65	1.67	1.40	1.37	1.12	2.24	2.62	2.66	2.55	2.22	2.18
54.1	50.7	81.9	28.4	77.1	52.3	39.3	40.9	28.3	18.7	11.1	24.0	16.3	16.9	28.3	55.5
92.8	93.7	93.8	87.6	95.2	98.6	90.1	76.5	60.1	22.0	43.1	65.2	51.8	55.8	75.2	88.5
25.0	24.3	47.2	41.5	40.0	76.3	69.0	42.2	5.1	3.7	3.7	14.7	23.5	16.1	20.8	73.1
35.7	44.0	45.5	56.1	50.0	62.1	79.0	56.0	32.4	11.5	37.5	40.7	30.6	35.2	75.0	80.0
3.6	6.0	0.0	7-3	5.0	5.4	7.8	9.3	12.7	27.0	3.8	3.1	8.2	5.7	5.7	2.5
1.15	1.14	1.06	1.11	1.23	1.35	1.52	1.56	2.31	2.67	1.04	1.03	1.04	1.04	1.51	1.33
2.01	1.95	2.02	1.73	2.04	1.99	2.03	1.93	2.00	2.01	1.52	1.71	1.30	1.49	1.78	1.55

C 141 142
L 141 142
Ko 141 142
Ka 141 142

Key to table on pp. 20 and 21

31: Debets--20 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table I.

A Summary of the Most Important Averages and Frequencies. Males

C
141 1. Groups
142 2. Eskimo
L 3. Coastal Chukchee
141 4. Traits
142 5. Diomidsk
Ko 6. Nauransk
141 7. Southeastern (Ungaziksk
142 and Serineksk)
Ka 8. Total
141 9. Uellensko-Dezhnevsk
142 10. Eastern (Bering Sea)
11. Northern
12. Reindeer Chukchee (Chauchu)
13. Reindeer Koryak (Chauchuven)
14. Coastal Koryak (Nymyllan and Remkeken)
15. Lamut
16. Chukot Peninsula
17. Anyuysk
18. Penzhina
19. Kamchatka
20. Rekinnikovsk
21. Penzhina (Kamensko-Itkansk)
22. Palansk
23. Itelmen
24. "Kamchadal"
25. Descendents of old Russian inhabitants of Kamchatka
26. Anadyrsko-Penzhina
27. Alarsk Buryat
28. North Koreans
29. Number of people investigated
30. Among them, in per cent
31. 20-24 years of age
32. 25-30 years of age
33. 40-60 years of age
34. Length of the body
35. Longitudinal diameter
36. Transverse diameter
37. Head index
38. Inclination of the forehead (1-3; 1--sharply sloping)
39. Supraorbital area
40. Morphological height of the face (from the low edge of the eyebrows)
41. Zygomatic diameter
42. Mandible diameter
43. Horizontal profile of the face
44. Projection of the cheek bones (1-3; 1--strong)
45. Projection of the chin (0-3; 0--negative in relation to the plane o the lower jaw)
46. Height of the nose from the lower edge of the eyebrows
47. Height of the nose at the bridge
48. Width of the nose
49. Nasal index from the lower edge of the eyebrows
50. Nasal index from the bridge
51. Height of the nasal bridge
52. Transverse profile of the nasal spine
53. Nasal spine
54. Concave
55. Straight
56. Sinuous

31: Debets--21 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table 1 (cont'd)

C
141 57. Convex
142 58. Tip of the nose (1-3; 1--upturned)
L
141 59. Position of the axes of the
142 nostrils (1-3; 1--transverse)
Ko 60. Development of the furrows
141 of the nasal wings (1-3;
142 1--weak)
Ka 61. Projection of the nasal wings
141 (1-3; 1--weak)
142 62. Profile of the upper lip (1-3; 1--forward)
63. Height of the cutaneous section of the upper lip
64. Width of the mouth
65. "Thickness" of both lips
66. Lobe of the ear (1-3; 1--adhering to the head)
67. Width of the eye slit (1-3; 1--narrow)
68. Inclination of the axes of the eyes (1-3; 1--the exterior corner is higher)
69. Epicanthus
70. Eyelid fold
71. Interior section (p)
72. Middle section (m)
73. Exterior section (d)
74. Swarthiness of skin (the interior surface of the shoulder) No. 10 and darker
75. Dark eyes
76. Black hair
77. Straight, stiff hair
78. Wavy hair
79. Beard growth (1-5) of people over 25 years of age
80. Growth of the eyebrows

31: Debets--22D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C
141
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L
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142
Ko
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142
Ka
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142

Table 2.

Сводка важнейших средних

1. Группы / 2. Признаки	3 Эскимосы	4 Чукчанки береговые	5 Чукчанки оленные Чукотского п-ва	6 Корячки оленные (чаучувенки) 7 пенжинские	8 камчатские
21 Число исследованных	85	87	42	58	80
22 В том числе, в %:					
23 20—24 г.	27.1	25.3	26.2	34.5	23.8
24 25—39 л.	48.2	51.7	42.8	41.8	52.5
25 40—60 л.	24.7	23.0	31.0	20.7	23.8
26 Длина тела	1519	1520	1536	1479	1487
27 Продольный диаметр	183.4	183.5	183.9	185.6	186.7
28 Поперечный диаметр	149.6	149.2	149.3	147.6	146.5
29 Головной указатель	(81.5)	(81.4)	(81.3)	(79.5)	(78.5)
30 Наклон лба (1—3: 1—сильно наклонный)	2.94	2.92	2.93	2.98	2.91
31 Надбровье (1—4)	1.00	1.00	1.00	1.00	1.00
32 Морфологическая высота лица (от нижнего края бровей)	127.5	127.3	127.6	121.3	122.8
33 Скуловой диаметр	140.3	141.0	139.5	139.1	138.0
34 Нижнечелюстной диаметр	112.0	113.8	111.7	112.6	112.0
35 Горизонтальная профилировка лица (1—3)	1.04	1.01	1.00	1.02	1.01
36 Выступание скул (1—3: 1—сильное)	—	—	—	1.45	1.40
37 Выступание подбородка (0—3: 0—отрицательный к плоскости нижней челюсти)	1.87	1.95	2.31	2.24	2.14
38 Высота носа от нижнего края бровей	58.4	57.9	57.9	55.3	56.0
39 Высота носа от переносья	50.1	48.2	48.5	44.9	47.8
40 Ширина носа	34.4	35.0	35.6	35.5	33.8
41 Носовой указатель от нижнего края бровей	(58.8)	(60.3)	(61.4)	(64.2)	(60.3)
42 Носовой указатель от переносья	(68.7)	(72.6)	(73.4)	(78.9)	(70.7)
43 Высота переносья (1—31)	1.33	1.17	1.29	1.05	1.25
44 Поперечный профиль спинки носа (1—3)	1.64	1.31	1.45	1.24	1.79
45 Спинка носа: вогнутая, % 46	27.1	43.7	54.8	53.4	31.2
прямая, % 47	44.7	48.2	42.8	43.1	61.3
извилистая, % 48	20.0	5.8	2.4	1.7	5.0
выпуклая, % 49	8.2	2.3	0.0	1.7	2.5
50 Кончик носа (1—3; 1—поднятый)	1.68	1.59	1.57	1.48	1.60
51 Положение осей ноздрей (1—3; 1—поперечное)	2.01	1.86	1.71	1.53	1.80
52 Выраженность крыльевых борозд (1—3; 1—слабая)	1.85	1.72	2.02	2.07	1.56
53 Выступание крыльев носа (1—3; 1—слабое)	1.87	1.77	1.91	2.09	1.85
54 Профиль верхней губы (1—3; 1—прогнатия)	1.06	1.01	1.00	1.00	1.14
55 Высота кожной части верхней губы	17.4	17.2	17.6	16.4	16.5
56 Ширина рта	52.4	53.5	55.4	51.8	49.7
57 «Толщина» обеих губ	17.0	19.5	17.9	16.7	14.1
58 Мочка уха (1—3; 1—приросшая)	2.07	1.80	2.21	1.97	1.69
59 Ширина глазной щели (1—3; 1—узкая)	—	—	—	1.75	1.87
60 Наклон осей глаз (1—3; 3—наружный угол выше)	—	—	—	2.44	2.41
61 Эпикантус, %	48.2	71.1	59.5	67.3	50.6
62 Складка века (0—3): внутренняя часть (p) 63	1.52	1.98	1.86	1.55	1.71
средняя часть (m) 64	1.55	2.09	2.07	1.73	1.76
наружная часть (d) 65	1.55	2.05	2.05	1.66	1.76

Key to Table on pp. 26 and 27

31: Debets--23D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

Table 2
Таблица 2

и частот. Женщины

Корячки береговые (нымылаанки и рэнтетанки) 9						Ламутки 16			
речнинские 10	пежинские (кэнжинско-мэнкинские) 11	пылгинские 12	Ительменки 13	«Камчадалки» 14	Русские старожилки Камчатки 15	аллаиргино-пежинские 17	камчатские 18	Сунтарские 19	Бурятки аларские 20
28	56	79	86	75	81	51	45	98	200
17.9	19.6	26.6	26.8	26.7	23.4	27.4	13.3	20.8	24.5
60.7	66.1	50.6	50.0	40.0	48.2	54.9	55.5	55.2	47.0
21.4	14.3	22.8	23.2	33.3	28.4	17.6	31.1	24.0	28.5
1468	1491	1500	1507	1529	1537	1486	1489	1488	1531
185.3	186.6	185.6	185.6	184.6	183.4	186.4	187.9	187.1	184.9
148.1	146.8	144.7	146.8	146.0	145.0	146.7	148.7	147.7	152.4
(79.9)	(78.6)	(77.9)	(78.9)	(79.1)	(79.0)	(78.6)	(79.1)	(78.8)	82.5
2.96	2.96	2.98	2.99	3.00	2.98	2.88	2.91	2.90	2.95
1.00	1.00	1.00	1.00	1.03	1.00	1.02	1.00	1.01	1.00
120.5	126.6	120.7	120.5	121.2	120.1	126.7	128.0	127.3	129.0
138.2	140.4	134.6	135.7	133.8	132.2	138.5	138.3	138.4	140.3
114.1	115.5	111.1	111.5	108.3	104.6	109.8	108.3	109.1	108.1
1.00	1.00	1.00	1.04	1.04	1.32	1.00	1.00	1.00	1.00
1.50	1.52	1.51	1.69	1.71	1.79	1.10	1.02	1.06	1.39
2.00	1.80	1.78	2.00	1.82	2.08	2.28	1.89	2.11	2.06
52.6	58.9	52.8	52.9	53.1	52.0	57.5	59.3	58.3	60.1
44.2	47.0	45.3	46.6	46.4	48.2	44.6	48.5	46.4	48.2
33.9	31.9	32.7	33.6	33.7	32.7	31.7	33.1	32.4	33.4
(64.5)	(57.5)	(61.9)	(63.4)	(63.5)	(62.8)	(55.1)	(53.8)	(55.4)	55.7
(76.7)	(72.1)	(72.2)	(72.1)	(72.5)	(67.9)	(71.1)	(68.2)	(69.8)	69.7
1.14	1.02	1.18	1.55	1.53	1.93	1.04	1.02	1.03	1.14
1.57	1.50	1.70	1.86	1.81	2.20	1.18	1.45	1.30	1.32
64.2	45.4	51.0	60.7	54.7	40.7	51.0	28.9	40.6	23.6
35.8	42.8	43.0	32.2	42.7	51.9	49.0	66.7	57.3	62.3
0.0	5.4	2.5	4.7	1.3	6.2	0.0	4.4	2.1	9.6
0.0	5.4	2.5	2.4	1.3	1.2	0.0	0.0	0.0	4.5
1.42	1.48	1.41	1.45	1.53	1.59	1.26	1.40	1.33	1.48
1.93	1.87	2.08	2.11	1.93	2.20	1.98	1.98	1.98	2.03
1.93	1.88	1.58	1.63	1.69	1.72	1.49	1.49	1.49	1.49
2.11	1.89	1.70	1.74	1.83	1.86	1.33	1.63	1.47	1.62
1.00	1.02	1.01	1.14	1.20	1.51	1.00	1.05	1.02	1.06
16.8	17.0	16.3	16.3	17.0	16.4	18.3	18.3	18.2	16.9
50.4	50.6	47.6	47.8	47.7	46.3	49.1	48.7	48.9	47.5
17.1	16.6	18.4	17.4	15.9	14.2	16.0	15.5	15.8	17.3
1.48	1.60	1.63	1.84	1.63	1.95	1.86	1.57	1.72	1.85
1.57	1.98	2.06	2.10	2.09	2.17	1.71	1.75	1.73	1.94
2.39	2.29	2.32	2.36	2.31	2.14	2.63	2.61	2.62	2.66
53.8	44.4	60.6	50.0	44.0	24.7	82.4	70.5	76.8	73.4
1.50	1.50	1.62	1.35	1.29	0.90	2.29	2.27	2.28	2.20
1.50	1.46	1.65	1.89	1.61	1.19	2.31	2.41	2.36	2.28
1.42	1.46	1.62	1.89	1.61	1.19	2.31	2.39	2.36	2.24

C 141 142
L 141 142
Ko 141 142
Ka 141 142

Key to Table on pp. 26 and 27

31: Debets- 24D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C
141
142

Table 2.

1 Группы / 2 Признаки	3 Эскимосы	4 Чукчанки береговые	5 Чукчанки оленные Чукотского п-ова	Корячки оленные (чаучуванки) 6	
				7 пенжинские	8 камчатские
66 Смуглая кожа (внутр. поверхн. плеча) № 10 и темнее, %	64.6	69.6	86.5	93.2	60.2
67 Темные глаза, %	96.5	97.7	95.3	98.2	97.5
68 Черные волосы (№ 27), %	72.2	52.3	38.1	48.3	48.8
69 Прямые жесткие волосы, %	77.6	62.1	59.5	62.0	77.2
70 Волнистые волосы, %	5.9	4.6	4.8	3.4	0.0
71 Рост бровей (1—3)	1.42	1.28	1.52	1.73	1.48

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Key to Table on pp. 26 and 27

31: Debets-25 D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C
141
142
L
141
142
KO
141
142
Ka
141
142

Table 2 (Continued)
Таблица 2 (продолжение)

Корячки береговые (вымиланки и рэмкенки) 9			Ительмены	«Камчадалы»	Русские старожилы Камчатки	Ламутки 16			Буряты-аларские
рекинниноские	пенжинские (каменско-итканские)	палланские				анадырско-пенжинские	камчатские	Сумарко	
10	11	12	13	14	15	17	18	19	20
76.0	76.6	56.2	57.9	73.0	34.8	16.6	26.2	22.3	50.6
88.9	100.0	100.0	86.0	77.3	71.5	88.2	81.8	85.2	85.0
42.8	69.1	57.3	23.2	8.1	5.2	5.9	9.5	7.5	10.1
60.7	80.2	65.3	32.2	27.4	11.5	19.6	43.3	30.5	71.0
3.6	3.6	0.0	3.6	2.7	2.6	0.0	2.3	1.1	0.0
1.68	1.55	1.75	1.69	1.63	1.62	1.22	1.11	1.17	1.31

Key to Table on pp. 26 and 27

31: Debets--26 D-5 (1947) 1949 Chukchee
Tungus: Lamut
Koryak
Kamchadal

Key to Table II.

A Summary of the Most Important Averages and Frequencies. Females

C
141 1. Groups
142 2. Traits
L 3. Eskimo
141 4. Coastal Chukchee
142 5. Reindeer Chukchee of the
Ko Chukot Peninsula
141 6. Reindeer Koryak
142 (Chauchuven)
Ka 7. Penzhina
141 8. Kamchatka
142 9. Coastal Koryak (Nymyllan and Remkeken)
11. Penzhina (Kamensko-Itkansk)
12. Palansk
13. Itelmen
14. "Kamchadal"
15. Descendents of old Russian inhabitants of Kamchatka
16. Lamut
17. Anadyrsko-Penzhina
18. Kamchatka
19. Total
20. Alarsk Buryat
21. Number of people investigated
22. Among them, in percent
23. 20-24 years of age
24. 25-39 years of age
25. 40-60 years of age
26. Length of the body
27. Longitudinal diameter
28. Transverse diameter
29. Head index
30. Inclination of the forehead (1-3; 1--sharply sloping)
31. Supraorbital area
32. Morphological height of the face (from the lower edge of the eyebrows)
33. Zygomatic diameter
34. Mandible diameter
35. Horizontal profile of the face
36. Cheekbone projection (1-3; 1--strong)
37. Projection of the chin (0-3; 0--negative in relation to the plane of the lower jaw)
38. Height of the nose from the lower edge of the eyebrows
39. Height of the nose at the bridge
40. Width of the nose
41. Nasal index from the lower edge of the eyebrows
42. Nasal index from the bridge
43. Height of the nasal bridge (1-31)[sic]
44. Transverse profile of the nasal spine
45. Nasal spine
46. Concave
47. Straight
48. Sinuous
49. Convex
50. Tip of the nose (1-3; 1--upturned)
51. Position of the axes of the nostrils (1-3; 1--transverse)
52. Development of the furrows of the nasal wings (1-3; 1--weak)

31: Debets--27 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table 2 (cont'd)

C
141 53. Projection of the nasal wings (1-3;
142 1--weak)
L 54. Profile of the upper lip (1-3; 1--
141 forward)
142 55. Height of the cutaneous section of
Ko the upper lip
141 56. Width of the mouth
142 57. "Thickness" of both lips
Ka 58. Lobe of the ear (1-3; 1--adhering)
141 59. Width of the eye slit (1-3; 1--narrow)
142 60. Inclination of the axes of the eyes (1-3;
3--the exterior corner is higher)
61. Epicanthus
62. Eyelid fold
63. Interior section (p)
64. Middle section (m)
65. Exterior section (d)
66. Swarthiness of skin (the interior surface
of the shoulder) No. 10 and darker
67. Dark eyes
68. Black hair
69. Straight, stiff hair
70. Wavy hair
71. Growth of the eyebrows

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 705

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*, their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
same dish with the dogs, which they never wash; every thing
264 about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

962 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
their natural lusts and appetites; these incline them to singing,
517 dancing, and relating of love stories Their greatest unhappiness
554 or trouble is the want of these amusements: they shun this by all
157 methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

[P. 89]

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Types of Kamchadal men, women and girls.

[R90]

●142
191

142
732

A. Elders of the villages of the western shore of Kamchatka.
B. Group of blind men and women of the village Kharyusovo.

142 The true Kamtſchadales are in general below the common height; their ſhape is round and ſquat, their eyes ſmall and ſunk, their cheeks prominent, their noſe flat, their hair black, they have ſcarcely any beard, and their complexion is a little tawny. The complexion and features of the women are very nearly the ſame; from this repreſentation, it will be ſuppoſed they are not very ſeducing objects.

157 578 476 The character of the Kamtſchadales is mild and hoſpitable; they are neither knaves, nor robbers; they have indeed ſo little penetration, that nothing is more eaſy than to deceive them, as we have ſeen in the advantage that is taken of their propenſity to intoxication. They live together in the utmoſt harmony, and the more ſo, it would ſeem, on account of the ſmallneſs of their number. This unanimity diſpoſes them to aſſiſt one another in their labours,

22: Guillemard T-2 (1882) 1886 Kamchadal

133 361 484 000

Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

142 144 164 177 361

Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

24: Lansdell-637-638 M-2 (1879) 1882 Kamchadal
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has scarcely any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

Ka 101 population of the area. The ethnonym "Russian" is used in everyday speech to refer only to the natives of the central areas of the RSFSR or of Siberia. Its equivalents are the Lamut (basically Yakut?) term "nyucha" and the Reindeer Koryak term "mel'khitan" (now becoming obsolete). The descendants of the ancient Russian population of Tigil', Mil'kov, etc., together with the Itelmen (both the Russianized ones and those who preserved their own language) and the coastal Koryak, are referred to in the Lamut language by the common term "kheek" (plural "khayakyl") and in the Reindeer Koryak dialect by the term "nymyllon."

Ka 144 An especially strong racial mixture are the inhabitants of the Kamchatka River valley where the Kamchadal and the Russian villages follow one another throughout the valley's length. It seems that under these conditions all the native inhabitants who speak Russian should be looked upon as a homogeneous whole. However, such is not at all the case.

Altogether 182 people who spoke the Russian language and called themselves Kamchadal were studied in the Kamchatka River valley. If in the use of this ethnonym one encounters discrepancies caused by the current official usage, these discrepancies arise both in the case of the native Russian and of

Ka 162 the Kamchadal proper settlements. The 1897 census indicated that there were there 103 persons both of whose parents were descendants of the old Russian settlers; that the persons whose parents were Kamchadal proper were 41 in number; and that there were 38 persons born of mixed marriages. A simple calculation shows that as a result of free intermarriages there must actually have been 87 Russians, 17 Kamchadal, and 78 persons of mixed stock. The intermarriages can hardly be explained by the [7] former social stratification of the population. They are rather to be explained by the territorial arrangement that members of different groups have. However, this racial mixing has been taking place already for a number of generations, and in addition the inhabitants of Kamchatka frequently change their place of residence. Although the number of our observations was small, the counting of the medians and of frequencies of all the basic traits indicates that differences between the so-called "pure" and the so-called "mixed" Kamchadal have been preserved.

Ka 142 Below is a small table composed only for the Kamchatka River valley. The figures are averages for both sexes (with

Ka the exception, of course, of beard growth).
142

	Kamchadal without a known Russian admixture	Kamchadal with a known Russian (descendants of ancient Russian immigrants) admixture
Color of eyes, % of dark ones	68.5	45
Horizontal facial profile, average rating	1.35	1.57
Epicanthus, %	32	15
Shape of hair, % of stiff ones	22	5
Growth of beard, average rating	2.02	2.50

Persons with a known admixture of Russian blood are not included in the general table enclosed in this article. The Kamchadal of the Kamchatka River are grouped together in the table with the natives of the settlements of the southwestern coast.

Ka 144 As could be expected the Russianized Itelmen (the Kamchadal proper) are related even more closely to the Russians than those Itelmen who speak their own language. Nevertheless, I have not met a single Kamchadal without a registered Russian admixture, who could not, at the first sight, be distinguished from a Russian. As for the natives of the settlements Tigil', Mil'kovo, Klyuchi, etc., there are among them people who are frequently practically indistinguishable from the Russian natives of the "continent," even though the Mongoloid admixture is reflected in them quite clearly.

Since in almost all their traits the Kamchadal hold an intermediate position between the Itelmen and the descendants of the ancient Russian immigrants, we may presume that before the Russian conquest all the aborigines of the peninsula were anthropologically close to the coastal Koryak, i.e., that they occupied an intermediate position between the Eskimo and the Kamchatka types.

In spite of its small significance the description of the external appearance of the Kamchadal given by Krasheninnikov

31: Debets--16 D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C 141 142
L 141 142
Ko 141 142
Ka 141 142

Сводка важнейших средних

1 Группы / 4 Признаки	2 Эскимосы				3 Чукчи береговые			
	5 диомидские	6 наукинские	7 юго-восточные (уналаскинские и сенгиньские)	8 суммарно	9 уэленско-хижинские	10 восточные (беринговоморские)	11 северные	8 суммарно
29 Число исследованных	25	66	100	191	22	82	86	190
30 В том числе, в %:								
31 20—24 г.	32.0	27.2	20.0	24.1	18.1	26.8	26.7	25.8
32 25—39 л.	36.0	47.0	56.0	50.3	63.7	47.6	51.2	51.0
33 40—60 л.	32.0	25.8	24.0	25.6	18.1	25.6	22.1	23.2
34 Длина тела	1653	1627	1615	1625	1636	1639	1617	1629
35 Продольный диаметр	193.3	191.3	189.0	190.3	190.3	190.9	189.2	190.1
36 Поперечный диаметр	153.3	155.8	154.1	154.6	153.2	154.4	154.4	154.3
37 Головной указатель	79.5	81.6	(81.5)	(81.2)	(80.6)	(80.9)	(81.6)	(81.2)
38 Наклон лба (1—3; 1 — сильно наклонный)	2.36	2.36	2.23	2.29	2.59	2.62	2.53	2.58
39 Надбровье (1—4)	1.36	1.39	1.50	1.45	1.45	1.32	1.23	1.30
40 Морфологическая высота лица (от нижнего края бровей)	135.9	134.3	137.5	136.2	132.0	136.8	134.4	135.1
41 Скуловой диаметр	147.6	149.5	147.9	148.4	144.5	148.5	147.0	147.4
42 Нижнечелюстной диаметр	117.2	116.8	119.6	118.3	116.4	118.9	117.6	118.0
43 Горизонтальная профилировка лица (1—3)	1.08	1.00	1.11	1.07	1.00	1.04	1.05	1.04
44 Выступание скул (1—3; 1—сильное)	—	—	—	—	—	—	—	—
45 Выступание подбородка (0—3; 0—отрицательный к плоскости нижней челюсти)	1.74	—	1.74	1.74	1.60	1.59	1.89	1.78
46 Высота носа от нижнего края бровей	61.3	61.3	62.6	62.0	59.7	61.6	60.7	61.0
47 Высота носа от переносья	54.2	53.4	55.4	54.6	52.5	54.2	52.8	53.4
48 Ширина носа	37.0	37.6	37.7	37.6	37.1	37.8	37.7	37.7
49 Носовой указатель от нижнего края бровей	60.7	61.7	(60.2)	(60.6)	(62.1)	(61.3)	(62.0)	(61.8)
50 Носовой указатель от переносья	69.2	70.6	(68.0)	(68.8)	(70.6)	(69.7)	(71.4)	(70.5)
51 Высота переносья (1—3)	1.64	1.42	1.71	1.60	1.55	1.49	1.37	1.44
52 Поперечный профиль спинки носа (1—3)	2.32	2.06	2.03	2.08	1.77	1.98	1.75	1.84

Key to table on pp. 20 and 21

31: Debets --17D-5 (1947) 1949

Chukchee
Tungus :Lamut
Koryak
Kamchadal

C 141 142
E 141 142
Ko 141 142
Ka 141 142

Table I
Таблица I

и частот. Мужчины

12 Чукчи оленные (чаучу)		13 Коряки оленные (чаучувены)		Коряки береговые (нымыланы и рамшиены) 14			23	24	25	Ламуты 15				27	28
16 Чукотского п-ова	17 анадырские	18 пенжинские	19 камчатские	20 рамшинские	21 пенжинские (каменско-ит-канские)	22 палянские	Ительмены	Камчадалы	Русские старожилы Камчатки	17 анадырские	26 анадырско-пенжинские	19 камчатские	8 сунтарские	Буряты аларские	Корейцы северные
96	80	50	64	54	73	72	89	90	100	27	47	57	13	250	122
22.9	26.2	30.0	26.6	20.4	30.2	19.4	20.2	21.1	21.0	14.8	34.0	15.8	22.1	22.8	23.0
49.0	47.5	42.0	45.3	61.1	53.5	51.4	50.6	36.7	45.0	63.0	44.7	43.9	48.1	44.0	54.0
28.1	26.2	28.0	28.1	18.5	16.4	29.2	29.2	42.2	34.0	22.2	21.3	40.3	29.8	33.2	23.0
1617	1588	1586	1591	1582	1617	1617	1627	1636	1648	1593	1607	1608	1604	1630	1628
188.7	188.7	190.8	192.4	190.3	194.2	193.2	193.4	192.8	192.3	195.8	193.9	194.5	194.6	192.8	183.1
153.7	156.5	152.7	152.3	151.6	151.2	149.6	152.4	151.7	151.0	155.4	154.4	154.5	154.6	157.8	154.4
(81.5)	83.0	(80.0)	(79.2)	(79.6)	(77.9)	(77.4)	(78.8)	(78.6)	(78.5)	(79.4)	(79.6)	(79.4)	(79.5)	81.9	(84.3)
2.74	2.56	2.54	2.63	2.65	2.53	2.80	2.64	2.59	2.35	2.58	2.26	2.19	2.29	2.61	2.70
1.18	1.21	1.32	1.28	1.26	1.27	1.11	1.17	1.29	1.53	1.19	1.32	1.47	1.36	1.26	1.24
132.1	128.6	128.0	128.0	125.7	133.0	128.4	130.0	130.4	130.6	136.4	135.4	133.9	135.0	135.9	131.9
146.3	147.7	145.4	144.5	144.6	145.1	143.3	144.3	142.7	141.9	146.6	148.2	147.3	147.5	148.8	143.9
117.2	115.6	116.6	118.4	120.3	119.4	119.4	120.3	117.5	114.9	115.8	116.8	117.3	116.8	115.2	112.1
1.05	1.08	1.06	1.11	1.04	1.03	1.08	1.20	1.40	1.98	1.00	1.00	1.02	1.01	1.05	1.05
—	—	1.86	1.89	1.87	1.92	1.74	1.89	1.91	2.14	—	1.46	1.40	1.43	1.70	1.76
2.32	—	2.21	2.18	2.00	1.78	1.78	1.75	2.04	2.23	—	2.24	2.02	2.12	1.93	1.72
59.2	58.4	58.2	58.8	56.6	61.1	56.4	57.4	57.8	57.9	63.0	61.3	62.4	62.1	63.5	58.9
51.8	51.6	50.4	50.8	48.6	51.5	50.1	51.7	52.5	53.6	52.0	49.5	53.1	51.6	53.7	51.4
38.7	38.8	37.9	37.6	37.5	36.4	36.8	37.2	36.5	35.9	38.0	35.3	36.1	36.2	36.5	37.3
(65.4)	67.1	(65.1)	(63.9)	(66.2)	(59.5)	(65.2)	(64.7)	(63.1)	(61.9)	(60.3)	(57.5)	(57.8)	(58.3)	58.0	(63.2)
(74.6)	75.7	(75.2)	(74.0)	(77.2)	(70.6)	(73.5)	(71.9)	(69.5)	(67.0)	(73.0)	(71.2)	(68.0)	(70.1)	68.3	(72.5)
1.39	1.31	1.29	1.44	1.32	1.60	1.56	1.76	1.88	2.34	1.19	1.07	1.18	1.14	1.42	1.16
1.69	1.70	1.76	2.08	1.76	1.92	2.02	2.10	2.12	2.64	1.61	1.35	1.79	1.38	1.71	1.88

Key to table on pp. 20 and 21

31: Debets-18 D-5 (1947) 1949

Chukchee
Tungus : lamut
Koryak
Kamchadal

C 141 142 T 141 142 Ko 141 142 Ka 141 142

1 Группы / 4 Признаки	2 Эскимосы				3 Чукчи береговые			
	5 аномасские	6 внутренние	7 юго-восточные (чаунские и сирениковские)	8 суммарно	9 увеленско-диомедовские	10 восточные (берингоморские)	11 северные	8 суммарно
53 Спинка носа								
54 Вогнутая, %	8.0	12.1	10.2	10.6	31.8	23.2	29.4	27.0
55 Прямая, %	52.0	63.7	41.9	50.7	54.5	41.4	58.8	50.8
56 Извилистая, %	20.0	12.1	20.4	17.5	9.1	25.6	8.2	15.9
57 Выпуклая, %	20.0	12.1	27.5	21.2	4.6	9.8	3.5	6.3
58 Кончик носа (1—3; 1—поднятый)	1.92	1.71	1.79	1.78	1.73	1.72	1.81	1.75
59 Положение осей ноздрей (1—3; 1—поперечное)	2.00	1.89	2.00	1.96	2.05	1.84	1.79	1.84
60 Выраженность крыльевых борозд (1—3; 1—слабая)	1.72	1.78	1.85	1.82	2.00	1.66	1.78	1.75
61 Выступание крыльев носа (1—3; 1—слабое)	1.76	1.90	2.06	1.97	2.05	1.84	1.78	1.84
62 Профиль верхней губы (1—3; 1—продейлия)	1.44	1.24	1.24	1.27	1.36	1.21	1.19	1.22
63 Высота кожной части верхней губы	19.0	18.1	18.7	18.5	18.1	18.2	18.5	18.4
64 Ширина рта	55.4	56.4	56.6	56.4	57.2	55.9	56.1	56.1
65 «Толщина» обеих губ	19.0	17.9	18.7	18.5	17.6	19.5	18.9	19.0
66 Мочка уха (1—3; 1—приросшая)	2.12	2.33	2.64	2.47	1.82	2.14	2.12	2.10
67 Ширина глазной щели (1—3; 1—узкая)	—	—	—	—	—	—	—	—
68 Наклон осей глаз (1—3; 3—наружный угол выше)	—	—	—	—	—	—	—	—
69 Эпикантус, %	33.3	42.4	28.3	33.9	27.3	64.1	61.2	58.5
70 Складка века (0—3)								
71 Внутренняя часть (*p*)	1.13	1.47	1.42	1.39	1.18	1.70	1.94	1.75
72 Средняя часть (*m*)	1.25	1.56	1.51	1.49	1.18	1.74	2.02	1.81
73 Наружная часть (*d*)	1.25	1.52	1.46	1.45	1.18	1.73	1.94	1.76
74 Смуглая кожа (внутр. поверхн. плеча) № 10 и темнее, %	84.0	40.0	64.5	58.5	83.4	65.7	74.6	71.1
75 Темные глаза, %	100.0	92.4	96.0	95.3	86.4	96.4	98.0	93.7
76 Черные волосы (№ 27), %	82.5	83.6	65.1	73.8	65.0	55.3	40.0	49.7
77 Прямые жесткие волосы, %	95.7	89.8	63.2	80.2	69.2	74.7	56.8	66.5
78 Волнистые волосы, %	4.3	2.0	8.1	4.9	7.7	8.4	9.4	8.7
79 Рост бороды (1—5) у лиц старше 25 л.	1.53	1.56	1.68	1.62	1.33	1.35	1.19	1.28
80 Рост бровей (1—3)	2.44	1.95	1.94	2.01	2.14	2.19	2.11	2.14

Key to table on pp. 20 and 21

31: Debets-19 D-5 (1947) 1949

Chukchee
Tungus Lamut
Koryak
Kamchadal

C 141 142 L 141 142 Ko 141 142 Ka 141 142

Table 1. (continued)
Таблица 1 (продолжение)

Чукчи оленные (чаучу) 16	17	Коряки оленные (чаучувены) 18	19	Коряки береговые (вымылдаины и рыннетаны) 14	20	21	22	23	24	25	Ламуты 15	26	27	8	27	28
Чукотское м-ств	анадырские	пенжинские	камчатские	рекинникские	пенжинские (пенжинско-тигильские)	палланские	Ительмены	«Камчадалы»	Русские старожилы Камчатки	анадырские	анадырско-пенжинские	камчатские	сумма, по	Буряты аларские	Корейцы северные
26.0	33.8	24.5	17.2	38.9	16.4	33.3	22.5	15.6	6.0	7.7	32.6	12.5	18.8	6.4	10.7
53.1	48.7	61.2	54.7	46.3	54.8	57.0	66.3	68.9	72.0	76.9	60.9	64.3	65.6	69.1	59.8
13.5	10.0	4.1	15.6	11.1	20.6	9.7	5.6	5.5	11.0	7.7	4.3	7.1	6.2	12.1	16.4
7.3	7.5	10.2	12.5	3.7	8.2	0.0	5.6	10.0	11.0	7.7	2.2	16.1	9.4	12.4	13.1
1.70	1.63	1.92	1.97	1.74	1.56	1.42	1.63	1.72	1.77	1.65	1.26	1.68	1.52	1.53	1.68
1.61	1.63	1.63	1.66	1.67	1.92	2.01	2.08	2.09	2.33	1.73	1.94	1.89	1.88	1.97	1.71
2.13	2.20	2.29	2.00	2.24	2.00	1.74	1.57	1.58	1.64	1.73	1.57	1.64	1.63	1.60	1.62
2.24	—	2.35	2.31	2.46	2.14	2.19	1.89	1.90	1.87	—	1.62	1.93	1.80	1.75	2.09
1.20	1.09	1.04	1.25	1.08	1.17	1.28	1.46	1.61	1.82	1.23	1.00	1.06	1.07	1.13	1.11
17.8	18.3	17.5	17.5	17.6	18.7	18.3	18.5	18.4	17.8	19.1	19.3	18.4	18.9	18.2	16.1
56.9	56.7	53.9	53.1	54.3	51.9	52.2	51.2	52.4	50.8	54.2	51.1	52.7	52.4	51.4	48.7
18.3	18.0	18.0	14.7	17.6	16.5	17.2	17.5	16.1	14.3	15.3	16.3	13.9	15.1	18.1	19.4
2.39	2.44	2.04	1.78	1.74	1.90	1.93	1.88	2.09	2.32	2.11	2.19	2.08	2.13	2.04	1.57
—	—	1.59	1.66	1.79	1.78	1.85	1.93	1.93	2.10	—	1.55	1.57	1.56	1.80	1.66
—	—	2.18	2.32	2.21	2.28	2.16	2.25	2.28	2.05	—	2.60	2.45	2.51	2.52	2.30
60.4	59.0	51.0	38.8	51.9	51.4	48.6	31.5	20.2	4.0	77.7	84.5	66.0	75.0	54.4	67.4
2.08	2.03	1.84	1.73	1.73	1.69	1.51	1.00	1.12	0.67	2.19	2.64	2.61	2.53	1.99	2.21
2.27	2.14	2.08	1.82	1.79	1.71	1.69	1.40	1.43	1.12	2.30	2.62	2.66	2.57	2.25	2.20
2.23	2.14	1.94	1.77	1.79	1.65	1.67	1.40	1.37	1.12	2.24	2.62	2.66	2.55	2.22	2.18
54.1	50.7	81.9	28.4	77.1	52.3	39.3	40.9	28.3	18.7	11.1	24.0	16.3	16.9	28.3	55.5
92.8	93.7	93.8	87.6	95.2	98.6	90.1	76.5	60.1	22.0	43.1	65.2	51.8	55.8	75.2	88.5
25.0	24.3	47.2	41.5	40.0	76.3	69.0	42.2	5.1	3.7	3.7	14.7	23.5	16.1	20.8	73.1
35.7	44.0	45.5	56.1	50.0	62.1	79.0	56.0	32.4	11.5	37.5	40.7	30.6	35.2	75.0	80.0
3.6	6.0	0.0	7.3	5.0	5.4	7.8	9.3	12.7	27.0	3.8	3.1	8.2	5.7	5.7	2.5
1.15	1.14	1.06	1.11	1.23	1.35	1.52	1.56	2.31	2.67	1.04	1.03	1.04	1.04	1.51	1.33
2.01	1.95	2.02	1.73	2.04	1.99	2.03	1.93	2.00	2.01	1.52	1.71	1.30	1.49	1.78	1.55

Key to table on pp. 20 and 21

31: Debets--20 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table 1.

A Summary of the Most Important Averages and Frequencies. Males

C
141 1. Groups
142 2. Eskimo
L 3. Coastal Chukchee
141 4. Traits
142 5. Diomidsk
Ko 6. Nauransk
141 7. Southeastern (Ungaziksk
142 and Serineksk)
Ka 8. Total
141 9. Uellensko-Dezhnevsk
142 10. Eastern (Bering Sea)
11. Northern
12. Reindeer Chukchee (Chauchu)
13. Reindeer Koryak (Chauchuven)
14. Coastal Koryak (Nymyllan and Remkeken)
15. Lamut
16. Chukot Peninsula
17. Anyuysk
18. Penzhina
19. Kamchatka
20. Rekinnikovsk
21. Penzhina (Kamensko-Itkansk)
22. Palansk
23. Itelmen
24. "Kamchadal"
25. Descendents of old Russian inhabitants of Kamchatka
26. Anadyrsko-Penzhina
27. Alarsk Buryat
28. North Koreans
29. Number of people investigated
30. Among them, in per cent
31. 20-24 years of age
32. 25-39 years of age
33. 40-60 years of age
34. Length of the body
35. Longitudinal diameter
36. Transverse diameter
37. Head index
38. Inclination of the forehead (1-3; 1--sharply sloping)
39. Supraorbital area
40. Morphological height of the face (from the low edge of the eyebrows)
41. Zygomatic diameter
42. Mandible diameter
43. Horizontal profile of the face
44. Projection of the cheek bones (1-3; 1--strong)
45. Projection of the chin (0-3; 0--negative in relation to the plane o the lower jaw)
46. Height of the nose from the lower edge of the eyebrows
47. Height of the nose at the bridge
48. Width of the nose
49. Nasal index from the lower edge of the eyebrows
50. Nasal index from the bridge
51. Height of the nasal bridge
52. Transverse profile of the nasal spine
53. Nasal spine
54. Concave
55. Straight
56. Sinuous

31: Debets--21 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table 1 (cont'd)

C
141 57. Convex
142 58. Tip of the nose (1-3; 1--upturned)
L
141 59. Position of the axes of the
142 nostrils (1-3; 1--transverse)
Ko 60. Development of the furrows
141 of the nasal wings (1-3;
142 1--weak)
Ka 61. Projection of the nasal wings
141 (1-3; 1--weak)
● 142 62. Profile of the upper lip (1-3; 1--forward)
63. Height of the cutaneous section of the upper lip
64. Width of the mouth
65. "Thickness" of both lips
66. Lobe of the ear (1-3; 1--adhering to the head)
67. Width of the eye slit (1-3; 1--narrow)
68. Inclination of the axes of the eyes (1-3; 1--the exterior corner is higher)
69. Epicanthus
70. Eyelid fold
71. Interior section (p)
72. Middle section (m)
73. Exterior section (d)
74. Swarthiness of skin (the interior surface of the shoulder) No. 10 and darker
75. Dark eyes
76. Black hair
77. Straight, stiff hair
78. Wavy hair
79. Beard growth (1-5) of people over 25 years of age
80. Growth of the eyebrows

31: Debets—22D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

C
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142

Table 2.

Сводка важнейших средних

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1. Группы / 2. Признаки	3 Эскимосы	4 Чукчи-оленеводы	5 Чукчи-оленеводы Чукотского п-ва	Корячки оленные (чаучуванцы) 6	
				7 пежинские	8 камчатские
21 Число исследованных	85	87	42	58	80
22 В том числе, в %:					
23 20—24 г.	27.1	25.3	26.2	34.5	23.8
24 25—39 л.	48.2	51.7	42.8	41.8	52.5
25 40—60 л.	24.7	23.0	31.0	20.7	23.8
26 Длина тела	1519	1520	1536	1479	1487
27 Продольный диаметр	183.4	183.5	183.9	185.6	186.7
28 Поперечный диаметр	149.6	149.2	149.3	147.6	146.5
29 Головной указатель	(81.5)	(81.4)	(81.3)	(79.5)	(78.5)
30 Наклон лба (1—3: 1—сильно наклонный)	2.94	2.92	2.93	2.98	2.91
31 Надбровье (1—4)	1.00	1.00	1.00	1.00	1.00
32 Морфологическая высота лица (от нижнего края бровей)	127.5	127.3	127.6	121.3	122.8
33 Скуловой диаметр	140.3	141.0	139.5	139.1	138.0
34 Нижнечелюстной диаметр	112.0	113.8	111.7	112.6	112.0
35 Горизонтальная профилировка лица (1—3)	1.04	1.01	1.00	1.02	1.01
36 Выступание скул (1—3: 1—сильное)	—	—	—	1.45	1.40
37 Выступание подбородка (0—3; 0—отрицательный к плоскости нижней челюсти)	1.87	1.95	2.31	2.24	2.14
38 Высота носа от нижнего края бровей	58.4	57.9	57.9	55.3	56.0
39 Высота носа от переносья	50.1	48.2	48.5	44.9	47.8
40 Ширина носа	34.4	35.0	35.6	35.5	33.8
41 Носовой указатель от нижнего края бровей	(58.8)	(60.3)	(61.4)	(64.2)	(60.3)
42 Носовой указатель от переносья	(68.7)	(72.6)	(73.4)	(78.9)	(70.7)
43 Высота переносья (1—31)	1.33	1.17	1.29	1.05	1.25
44 Поперечный профиль спинки носа (1—3)	1.64	1.31	1.45	1.24	1.79
45 Спинка носа: вогнутая, % 46	27.1	43.7	54.8	53.4	31.2
прямая, % 47	44.7	48.2	42.8	43.1	61.3
извилистая, % 48	20.0	5.8	2.4	1.7	5.0
выпуклая, % 49	8.2	2.3	0.0	1.7	2.5
50 Кончик носа (1—3; 1—поднятый)	1.68	1.59	1.57	1.48	1.60
51 Положение осей ноздрей (1—3; 1—поперечное)	2.01	1.86	1.71	1.53	1.80
52 Выраженность крыльевых борозд (1—3; 1—слабая)	1.85	1.72	2.02	2.07	1.56
53 Выступание крыльев носа (1—3; 1—слабое)	1.87	1.77	1.91	2.09	1.85
54 Профиль верхней губы (1—3; 1—прогнатия)	1.06	1.01	1.00	1.00	1.14
55 Высота кожной части верхней губы	17.4	17.2	17.6	16.4	16.5
56 Ширина рта	52.4	53.5	55.4	51.8	49.7
57 «Толщина» обеих губ	17.0	19.5	17.9	16.7	14.1
58 Мочка уха (1—3; 1—приросшая)	2.07	1.80	2.21	1.97	1.69
59 Ширина глазной щели (1—3; 1—узкая)	—	—	—	1.75	1.87
60 Наклон осей глаз (1—3; 3—наружный угол выше)	—	—	—	2.44	2.41
61 Эпикантус, %	48.2	71.1	59.5	67.3	50.6
62 Складка века (0—3): внутренняя часть (p) 63	1.52	1.98	1.86	1.55	1.71
средняя часть (m) 64	1.55	2.09	2.07	1.73	1.76
наружная часть (d) 65	1.55	2.05	2.06	1.66	1.76

Key to Table on pp. 26 and 27

31: Debets--23D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

Table 2
Таблица 2

и частот. Женщины

Корячки береговые (нымылаки и ромчоны) 9			Ительмены	Камчадалы	Русские старожилы Камчатки	Ламутки 16			
речные-поселые	нижнекамчатские (нымылаки-ромчоны)	пеланские				анадырско-пенжинские	камчатские	Сумнарско	Буретинские
10	11	12	13	14	15	17	18	19	20
28	56	79	86	75	81	51	45	96	200
17.9	19.6	26.6	26.8	26.7	23.4	27.4	13.3	20.8	24.5
60.7	66.1	50.6	50.0	40.0	48.2	54.9	55.5	55.2	47.0
21.4	14.3	22.8	23.2	33.3	28.4	17.6	31.1	24.0	28.5
1468	1491	1500	1507	1529	1537	1486	1489	1488	1531
185.3	186.6	185.6	185.6	184.6	183.4	186.4	187.9	187.1	184.9
148.1	146.8	144.7	146.8	146.0	145.0	146.7	148.7	147.7	152.4
(79.9)	(78.6)	(77.9)	(78.9)	(79.1)	(79.0)	(78.6)	(79.1)	(78.8)	82.5
2.96	2.96	2.98	2.99	3.00	2.98	2.88	2.91	2.90	2.95
1.00	1.00	1.00	1.00	1.03	1.00	1.02	1.00	1.01	1.00
120.5	126.6	120.7	120.5	121.2	120.1	126.7	128.0	127.3	129.0
138.2	140.4	134.6	135.7	133.8	132.2	138.5	138.3	138.4	140.3
114.1	115.5	111.1	111.5	108.3	104.6	109.8	108.3	109.1	108.1
1.00	1.00	1.00	1.04	1.04	1.32	1.00	1.00	1.00	1.00
1.50	1.52	1.51	1.69	1.71	1.79	1.10	1.02	1.06	1.39
2.00	1.80	1.78	2.00	1.82	2.08	2.28	1.89	2.11	2.06
52.6	58.9	52.8	52.9	53.1	52.0	57.5	59.3	58.3	60.1
44.2	47.0	45.3	46.6	46.4	48.2	44.6	48.5	46.4	48.2
33.9	31.9	32.7	33.6	33.7	32.7	31.7	33.1	32.4	33.4
(64.5)	(57.5)	(61.9)	(63.4)	(63.5)	(62.8)	(55.1)	(53.8)	(55.4)	55.7
(76.7)	(72.1)	(72.2)	(72.1)	(72.5)	(67.9)	(71.1)	(68.2)	(69.8)	69.7
1.14	1.02	1.18	1.55	1.53	1.93	1.04	1.02	1.03	1.14
1.57	1.50	1.70	1.86	1.81	2.20	1.18	1.45	1.30	1.32
64.2	45.4	51.0	60.7	54.7	40.7	51.0	28.9	40.6	23.6
35.8	42.8	43.0	32.2	42.7	51.9	49.0	66.7	57.3	62.3
0.0	5.4	2.5	4.7	1.3	6.2	0.0	4.4	2.1	9.6
0.0	5.4	2.5	2.4	1.3	1.2	0.0	0.0	0.0	4.5
1.42	1.48	1.41	1.45	1.53	1.59	1.26	1.40	1.33	1.48
1.93	1.87	2.08	2.11	1.93	2.20	1.98	1.98	1.98	2.03
1.93	1.88	1.58	1.63	1.69	1.72	1.49	1.49	1.49	1.49
2.11	1.89	1.70	1.74	1.83	1.86	1.33	1.63	1.47	1.62
1.00	1.02	1.01	1.14	1.20	1.51	1.00	1.05	1.02	1.06
16.8	17.0	16.3	16.3	17.0	16.4	18.3	18.3	18.2	16.9
50.4	50.6	47.6	47.8	47.7	46.3	49.1	48.7	48.9	47.5
17.1	16.6	18.4	17.4	15.9	14.2	16.0	15.5	15.8	17.3
1.48	1.60	1.63	1.84	1.63	1.95	1.86	1.57	1.72	1.83
1.57	1.98	2.06	2.10	2.09	2.17	1.71	1.75	1.73	1.94
2.39	2.29	2.32	2.36	2.31	2.14	2.63	2.61	2.62	2.66
53.8	44.4	60.6	50.0	44.0	24.7	82.4	70.5	76.8	73.4
1.50	1.50	1.62	1.35	1.29	0.96	2.29	2.27	2.28	2.20
1.50	1.46	1.65	1.89	1.61	1.19	2.31	2.41	2.36	2.28
1.42	1.46	1.62	1.89	1.61	1.19	2.31	2.39	2.36	2.24

C 141 142
L 141 142
Ko 141 142

Key to Table on pp. 26 and 27

31: Debets- 24D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

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Table 2.

1 Группы / 2 Признаки	3 Эскимосы	4 Чукчанки береговые	5 Чукчанки оленные Чукотского п-ова	Корячки оленные (чаучуванки) 6	
				7 пенжинские	8 камчатские
66 Смуглая кожа (внутр. поверхн. плеча) № 10 и темнее, %	64.6	69.6	86.5	93.2	60.2
67 Темные глаза, %	96.5	97.7	95.3	98.2	97.5
68 Черные волосы (№ 27), %	72.2	52.3	38.1	48.3	48.8
69 Прямые жесткие волосы, %	77.6	62.1	59.5	62.0	77.2
70 Волнистые волосы, %	5.9	4.6	4.8	3.4	0.0
71 Рост бровей (1—3)	1.42	1.28	1.52	1.73	1.48

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Key to Table on pp. 26 and 27

31: Debets-25 D-5 (1947) 1949

Chukchee
Tungus: Lamut
Koryak
Kamchadal

Table 2 (continued)
Таблица 2 (продолжение)

Корячки береговые (нымылаки и рамачаки) 9			Ительмены	«Камчадалы»	Русские старожилы Камчатки	Ламутки 16			Буряты аларские
рекинниковские	пежинские (каменскинские)	палланские				анадырско-пенжинские	камчатские	Сунтарские	
10	11	12	13	14	15	17	18	19	20
76.0	76.6	56.2	57,9	73.0	34.8	16.6	26.2	22.3	50.6
88.9	100.0	100.0	86.0	77.3	71.5	88.2	81.8	85.2	85.0
42.8	69.1	57.3	23.2	8.1	5.2	5.9	9.5	7.5	10.1
60.7	80.2	65.3	32.2	27.4	11.5	19.6	43.3	30.5	71.0
3.6	3.6	0.0	3.6	2.7	2.6	0.0	2.3	1.1	0.0
1.68	1.55	1.75	1.69	1.63	1.62	1.22	1.11	1.17	1.31

C 141 142
L 141 142
Ko 141 142
Ka 141 142

Key to Table on pp. 26 and 27

31: Debets--26 D-5 (1947) 1949 Chukchee
Tungus: Lamut
Koryak
Kamchadal

Key to Table II.

A Summary of the Most Important Averages and Frequencies. Females

C
141 1. Groups
142 2. Traits
L 3. Eskimo
141 4. Coastal Chukchee
142 5. Reindeer Chukchee of the
Ko Chukot Peninsula
141 6. Reindeer Koryak
142 (Chauchuven)
Ka 7. Penzhina
141 8. Kamchatka
142 9. Coastal Koryak (Nymyllan and Remkeken)
11. Penzhina (Kamensko-Itkansk)
12. Palansk
13. Itelmen
14. "Kamchadal"
15. Descendents of old Russian inhabitants of Kamchatka
16. Lamut
17. Anadyrsko-Penzhina
18. Kamchatka
19. Total
20. Alarsk Buryat
21. Number of people investigated
22. Among them, in percent
23. 20-24 years of age
24. 25-39 years of age
25. 40-60 years of age
26. Length of the body
27. Longitudinal diameter
28. Transverse diameter
29. Head index
30. Inclination of the forehead (1-3; 1--sharply sloping)
31. Supraorbital area
32. Morphological height of the face (from the lower edge of the eyebrows)
33. Zygomatic diameter
34. Mandible diameter
35. Horizontal profile of the face
36. Cheekbone projection (1-3; 1--strong)
37. Projection of the chin (0-3; 0--negative in relation to the plane of the lower jaw)
38. Height of the nose from the lower edge of the eyebrows
39. Height of the nose at the bridge
40. Width of the nose
41. Nasal index from the lower edge of the eyebrows
42. Nasal index from the bridge
43. Height of the nasal bridge (1-31)[sic]
44. Transverse profile of the nasal spine
45. Nasal spine
46. Concave
47. Straight
48. Sinuous
49. Convex
50. Tip of the nose (1-3; 1--upturned)
51. Position of the axes of the nostrils (1-3; 1--transverse)
52. Development of the furrows of the nasal wings (1-3; 1--weak)

31: Debets--27 D-5 (1947) 1949 Chukchee
Tungus:Lamut
Koryak
Kamchadal

Key to Table 2 (cont'd)

C
141 53. Projection of the nasal wings (1-3;
142 1--weak)
L 54. Profile of the upper lip (1-3; 1--
141 forward)
142 55. Height of the cutaneous section of
Ko the upper lip
141 56. Width of the mouth
142 57. "Thickness" of both lips
Ka 58. Lobe of the ear (1-3; 1--adhering)
141 59. Width of the eye slit (1-3; 1--narrow)
142 60. Inclination of the axes of the eyes (1-3;
3--the exterior corner is higher)
61. Epicanthus
62. Eyelid fold
63. Interior section (p)
64. Middle section (m)
65. Exterior section (d)
66. Swarthiness of skin (the interior surface
of the shoulder) No. 10 and darker
67. Dark eyes
68. Black hair
69. Straight, stiff hair
70. Wavy hair
71. Growth of the eyebrows

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

563 to consist in this, that the Cossacks live in houses, and the natives in huts under ground; the Cossacks usually eat their fish boiled, and the natives mostly dry; besides, the Cossacks dress their several ways different from the natives. As it is impossible for people to live there without the help of women, who are so necessary in many parts of their work, such as cleaning their fish, drying their roots, spinning and making their shirts and cloaths, and as the Cossacks first settled in *Kamtschatka* without their wives, whom upon account of the difficulty of the journey they could not transport thither, I shall now relate what methods they used to make up for this deficiency.

144 563 177 567 One may easily imagine, that the Cossacks did not reduce these people without using force; and in these wars they took prisoners many women and children as well as men, and obliged them to perform all the labour. The care of overlooking these servants was entrusted to such as they made their concubines, whom they frequently married if they had any children by them; and sometimes the natives offered them their daughters, whom they promised to marry as soon as the priest arrived: so that it sometimes happened that the Cossacks had a marriage and christening at the same time; for then there was but one priest in all *Kamtschatka*, who lived in the lower fort, and once in a year, or once in two years, visited the other settlements.

563 567 The Cossacks, a people rude enough themselves, seemed to be pretty well pleased with the manner of living here, using the natives as their slaves, who furnished them with sables and other furrs in abundance, and passing the greatest part of their time in playing at cards: their only want seemed to be that of brandy. Before there were any brandy shops they used to meet in the office where the tax was received: here the gamesters brought their furrs, and, when they had no furrs, even their slaves; and

132 From this table it is seen that the climate of Tighil is much colder than that of Petropavlovsk and that the climate of Kluchevskoye, by its yearly and some of its monthly mean temperatures, is colder than that of Petropavlovsk, but by its summer temperature (May, June and July) it is warmer than that of Petropavlovsk.

Temperature of the soil. Monthly means, 1909.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Amplitude
Petropavlovsk:													
(1)	−10°5	−10°6	− 7°3	−0°3	8°8	14°5	17°6	15°6	10°9	.....	−4°7	−10°5	26°2
(2)	0.6	0.4	0.3	0.1	4.9	0.3	.....	13.4	10.9	.....	1.9	0.9	13.3
(3)	1.9	1.6	1.4	0.9	3.1	6.5	.....	12.1	10.4	.....	3.6	2.4	11.2
(4)	3.8	3.4	3.0	2.6	1.8	2.7	.....	6.8	7.1	.....	5.2	4.4	5.5
Kluchevskoye:													
(1)	−15.1	−17.3	−13.2	−2.4	10.2	15.6	19.3	15.9	.....	.....	−8.3	−19.3	36.6
(2)	− 9.5	−10.3	− 7.8	−3.1	3.5	9.3	12.8	12.4	.....	.....	−3.0	−10.4	22.2
(3)	− 1.2	− 2.6	− 2.6	−2.2	−0.8	0.0	3.0	4.0	.....	.....	1.7	0.1	6.8
(4)	1.4	1.0	0.7	0.5	0.4	0.4	0.4	0.4	.....	.....	2.7	2.1	2.3
Tighil:													
(1)	−15.3	−20.3	−14.0	−2.8	6.8	13.0	15.7	13.3	8.4	1.7	−6.1	−15.6	36.0
(2)	−11.9	−14.7	−13.0	−3.9	1.8	6.9	10.6	10.7	8.1	2.7	0.8	0.4	25.4
(3)	− 3.1	− 6.2	− 6.9	−4.4	−0.3	0.0	1.1	4.0	5.1	3.0	0.9	0.3	12.0
(4)	0.4	0.0	− 0.3	−0.9	−0.6	−0.3	−0.2	−0.2	0.0	0.3	0.3	0.2	1.2

(1) means on the surface; (2) means 0.25 meter deep; (3) means 1.0 meter deep; (4) means 2.0 meter deep.

This table is compiled from the numerous data on this subject by Vlasov, in order to show what time of the year may be regarded as the most favorable for making excavations in Kamchatka. In Petropavlovsk from May to September inclusive; in Kluchevskoye from July to September; in Tighil in August and September, and even in these two months we meet the freezing point at the depth of two meters. My own experience in that region gave still less favorable results. While digging on June 11 on the bank of Kulki River, a tributary of Tighil River, not far from the village Tighil, I met frozen soil at the depth of one foot and down. According to Vlasov only at the depth of more than 1 meter (3.28 feet) is the soil in Tighil frozen in that month.

SOMATOLOGY

144 177 The present Kamchadal have become mixed with Russian settlers and many have lost their former Koryak-like appearance, even in places where officially no Russians are recorded. The same may be said of the inhabitants of the southern villages, Yavino and Golyghino, who in former times might have been physically influenced by the Kurilians (i. e., the Northern Ainos). The Kurilians had intercourse with the Southern Kamchadal, and some Kurilians had settlements on the southern extremity of the Kamchatka Peninsula.

141 The measurements of Kamchadal taken by Mrs. Jochelson show that the Russian metisation influenced very little the physical character of the Kamchadal. 158 men and 170 women were measured. The following table gives some of the measurements and indices.

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

22: Guillemard T-2 (1882) 1886 Kamchadal

114 136 remains of many half-eaten fish lay on the banks. The bears are said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 144 157 161 177 361 Sherowmy, or Sherowm,—for the Kamschatkans are fond of clipping the exuberance of their words, and turn Kamakoffskaya into Kamaki,—is a pretty little village of nine houses and forty-three inhabitants, situated on a branch of the Kamschatka River close to its junction with the latter. To the south lie a few acres of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

22: Guillemard T-2 (1882) 1886 Kamchadal

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Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

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144
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Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

136 eastern form of the Pied Wagtail (Kittlitz's *Motacilla lugens*) was extremely numerous; the Yellow Wagtail much less so. But of all the land birds the Kamschatkan Marsh Tit (*P. kamschatkensis*) was at this part of the river by far the most abundant. For two or three days we saw them in flocks of from fifty to a couple of hundred individuals, streaming northward along the bank from tree to tree.

133 Shortly after mid-day we passed the mouth of a river joining the Kamschatka on the right bank. The natives knew it as the Kojerevska. It is a stream of some size, being apparently of considerable depth, and having a breadth of forty yards at its junction with the main stream. As far as we could gather, it drains the opposing slopes of the Tolbatchinska and Kojerevska volcanoes.

We reached the little hamlet of Kojerevsky at nightfall. The distance from Tolbatchik, the scene of the last rows we had had with the natives, is only ninety-one versts instead of two hundred, and we might with perfect justice have reduced our payment to half of the sum we had promised. But, to tell the truth, we had become so wearied of the endless wranglings in which we had been involved in all our dealings with these wretched people that we paid them without a word. It was better to let them think that they had deceived us than for them to imagine that we had weakly yielded to what we knew to be an imposition. We were
262 pleased to find that the Kojerevskans exhibited strong evidences of
144 their Kamschatdale descent. We were received by the head-man, a little brown fellow with bright eyes; and under his direction the people did everything in their power to help us, carrying up our baggage, bringing us wood, and altogether showing us an amount of civility that was as new to us as it was agreeable. They provided us with wild cherries, cranberries, potatoes, turnips, milk, cream, and butter, and last, but by no means least, with a loaf of coarse rye bread, which, we heard, had been specially prepared for the Kluchi pope, who had been expected to pay the settlement a visit.

000 the roubles would no doubt start for Petropaulovsky, and turn them into vodky without loss of time.

144 We could make out nothing about the nationality of the people of this village. We had been told that some Aleuts from the Bering group had settled in this neighbourhood, but it seems that the Kurile islanders have also passed northward, and established themselves on the coast near Cape Lopatka. To us it appeared that they did not differ appreciably from the Kamschatdale type, but the opinion of a mere passer-by on these matters is usually valueless. Nothing certain is at present known of the origin of the Kamschatdales and Koriaks—the aboriginal tribes of the peninsula. Both appear to have become greatly reduced in numbers since the Russian conquest. As a pure race the Kamschatdales are now rare, except on the western side of the country. The Koriaks rarely or never come south of the Tigil River. They are a nomad race like the Lapps, owning reindeer and living in movable tents, and, like them, coming down to the lower ground in winter. Both these tribes belong to the "Hyperborean" unclassified group, and Mr. Keane[1] considers the Koriak as probably the parent stock of the sub-arctic races of this part of the globe. Their language as shown by the vocabulary of M. de Lesseps, although bearing but a faint resemblance to the Kamschatdale, is closely allied to that of the Tchuktchi tribe in the region of the Anadyr, and it is possible that, ethnically as well as geographically, they form a connecting link between these two latter peoples.[2]

563 I am not aware that the presence of Lamuts in Kamschatka has ever been recorded by previous writers, but while on our journey through the country we were told by Afanasi Waren

144 [1] "Asia." Stanford's Compendium of Geography and Travel.

167 [2] The accidental immigration of Japanese must be regarded as a not unimportant factor in the composition of the Kamschatdale race. Short as is the period that has elapsed since the Russian conquest, it has furnished several instances, recorded by Krashéninikov, of Japanese junks having been driven from their course and wrecked on the shores of the peninsula. This chance peopling of the country has, no doubt, been going on for centuries, and it is probable that but few of the immigrants ever regained their native land.

L 144 features. This is to be expected if one takes into account the fact that the functionally independent traits of the Mongoloid stock were formed at different times and in different, though adjacent and even mutually overlapping areas.

soft, though straight hair, and also by their white skin, which is accompanied by a certain amount of depigmentization of eyes and of hair.

Ko 144 141 The Reindeer Koryak of the Penzhina River basin are hardly distinguished from the Reindeer Chukchee. Among them we frequently encounter epicanthus and many broad noses with horizontally situated nostrils and with developed nasal wings. Their faces are of a moderate [5] height. It is only their head index which is lower than that of the Reindeer Chukchee. The Reindeer Koryak of Kamchatka are characterized by a more sharply defined nose and by a lesser frequency of the epicanthus. However, the horizontal position of nostrils and a marked development of nasal wings is encountered among them approximately as frequently as among the Penzhina nomads and the Reindeer Chukchee. These traits of the Reindeer Chukchee and of the Koryak are suprisingly uniform between Kolyma and the Chukot Peninsula on the one hand and the center of Kamchatka on the other.

In our further exposition the prevailing type of the Reindeer Chukchee and of the Koryak will be referred to briefly as the Kamchatka type. It is true that the distribution of this type extends beyond the boundaries of the peninsula, but so does--in connection with the administrative divisions--the name "Kamchatka." Moreover, we frequently encounter representatives of the Kamchatka type in the north of the peninsula.

Ko 141 144 Because of the brevity of description and the contradictions in the data contained in the scientific literature, below we shall describe the traits of the Kamchatka type.

Ka 141 144 In covered places the color of the skin is white or swarthy (Nos. 7-13 of the Lushan scale), the face is easily tanned reaching No. 25. The eyes of almost all the representatives of this type are dark; the hair is black, but more frequently with a tincture of brown (No. 4 of the Fisher scale). The hair is straight and moderately hard. The tertiary hair covering on the body and the face is small. One meets, however, moustaches. Eyebrows are of moderate growth. The face is flat, but with less developed cheekbones than, for example,

Ko among the Lamut. The size of the face is average. Among
141 males the morphological height of the lower edge of brows is
144 128 millimeters, and the zygomatic diameter is 145 millimeters. The lower jaw is broad, especially in comparison
Ka with the moderate breadth of the cheekbones. The nose is
141 moderately or weakly defined, but much more strongly than
144 it is among the Lamut. Its breadth among the males of middle age is most frequently 38-39 millimeters. One frequently encounters a transverse position of the nostrils and a marked development of nasal wings. The frequency of the concave shape of the nasal profile is greater than that of the convex shape, but the prevailing type of nose is straight. The tip and the base of the nose are horizontal, and less frequently--upturned. Among the middle-aged men the epicanthus is encountered in 40-60 per cent of cases, the fold of the eyelid is moderately developed, the position of the eye slit is more frequently horizontal, and the eye opening is narrow or average. The upper lip is more often high and always forward. The lips are of moderate thickness, but are relatively thicker than the lips of the Lamut. The head is moderately brachycephalic (80-83), the forehead is more frequently straight with weakly or moderately developed supraorbital arches. The length of the male body is on the average 158-160 centimeters.

Ko The coastal Koryak of western Kamchatka turned out to be
144 anthropologically heterogeneous. The Rekinnikovsk group
141 (on the western side of the isthmus) is a fairly characteristic representative of the Kamchatka type. The Penzhina and the Kamchatka (Palana) proper coastal Koryak have the traits which differ from those of the Reindeer Koryak in the same direction in which the traits of the coastal Chukchee differ from those of the Reindeer Chukchee. Their nose is broader and more clearly defined. The horizontal position of the nostrils and the marked development of nasal wings is encountered much less frequently. The hair is much stiffer and the bluish-black tinge (No. 27 of the Fisher scale) is encountered more frequently. The beard is more pronounced. All these are "Eskimoid" peculiarities. However, the height of the face is noticeably greater only among the Penzhina coastal Koryak as compared to the height of the face of their nomadic fellow tribesmen. The concave shape of the nasal profile continues to prevail over the convex, the epicanthus is encountered just as frequently as among the Reindeer tribesmen, although the eyelid folds are somewhat less developed.

Ko 141 On the whole the coastal Koryak type holds an intermediate position between the Kamchatka and the Eskimo types.

144 [6] The Itelmen, who have preserved their language, are anthropologically still mixed up with the Russians. This is Ka 144 corroborated both by the data of the interviews and by the similarity of all their traits to the white-haired Europeoid race. These traits include pigmentation, stiffness of the hair, the structure of the cheekbones, the profile of the upper lip, etc. It follows therefore that the deviation of the Itelmen from the "Mongoloid standard" in the form of their nose, in the structure of their eyelids, and in the development of their beard, as well as the similarity of these Itelmen traits to those of the Eskimo must be regarded not as proof of a direct relationship of the two groups but as a result of the mixture of the Russians with the Itelmen. The ancient Itelmen type was indubitably characterized by a greater frequency of the epicanthus than among the Eskimo and by a less sharply defined nose. On the whole, they were probably related to the coastal Koryak, and thus they also held an intermediate position between the characteristic representatives of the Eskimo and the Kamchatka types.

The Russianized Itelmen (in the future I shall call them by their conventional term "Kamchadal") are not easily distinguished from the descendants of the ancient Russian inhabit- Ka ants of Kamchatka. In the official documents only the 1897 659 census made a clear-cut demarcation between the two groups, 101 [the Kamchadal, and the Russianized descendants of the Itel- 565 men--Analyst] and such a demarcation was facilitated at the time it was done by the difference in social rank (sosloviye) of the members of the two groups. Yet even then this was an isolated and purely formal difference. The 1926 census reflects in this respect an unbridled arbitrariness of the census takers. The inhabitants of the ancient Upper Kamchatka and Lower Kamchatka forts are referred to in the census as Kamchadal, while the Russianized descendants of the Itelmen from the villages of Kikhchik, Kolpakovo, Krutogorovo, Oblukovina, etc. are referred to as Russians.

Ka 101 The contemporary official records are fully justified in not giving recognition to the term "Kamchadal" and in regarding all the Russian-speaking people of Kamchatka as Russians. However, this term has not become obsolete in everyday conversation, and is employed by the natives as well as by the new immigrants not only with reference to the Russianized Itelmen but also to the descendants of the ancient Russian

Ka 101 population of the area. The ethnonym "Russian" is used in everyday speech to refer only to the natives of the central areas of the RSFSR or of Siberia. Its equivalents are the Lamut (basically Yakut?) term "nyucha" and the Reindeer Koryak term "mel'khitan" (now becoming obsolete). The descendants of the ancient Russian population of Tigil', Mil'kov, etc., together with the Itelmen (both the Russianized ones and those who preserved their own language) and the coastal Koryak, are referred to in the Lamut language by the common term "kheek" (plural "khayakyl") and in the Reindeer Koryak dialect by the term "nymyllon."

Ka 144 An especially strong racial mixture are the inhabitants of the Kamchatka River valley where the Kamchadal and the Russian villages follow one another throughout the valley's length. It seems that under these conditions all the native inhabitants who speak Russian should be looked upon as a homogeneous whole. However, such is not at all the case.

Altogether 182 people who spoke the Russian language and called themselves Kamchadal were studied in the Kamchatka River valley. If in the use of this ethnonym one encounters discrepancies caused by the current official usage, these discrepancies arise both in the case of the native Russian and of

Ka 162 the Kamchadal proper settlements. The 1897 census indicated that there were there 103 persons both of whose parents were descendants of the old Russian settlers; that the persons whose parents were Kamchadal proper were 41 in number; and that there were 38 persons born of mixed marriages. A simple calculation shows that as a result of free intermarriages there must actually have been 87 Russians, 17 Kamchadal, and 78 persons of mixed stock. The intermarriages can hardly be explained by the [7] former social stratification of the population. They are rather to be explained by the territorial arrangement that members of different groups have. However, this racial mixing has been taking place already for a number of generations, and in addition the inhabitants of Kamchatka frequently change their place of residence. Although the number of our observations was small, the counting of the medians and of frequencies of all the basic traits indicates that differences between the so-called "pure" and the so-called "mixed" Kamchadal have been preserved.

Ka 142 Below is a small table composed only for the Kamchatka River valley. The figures are averages for both sexes (with

Ka 142 the exception, of course, of beard growth).

	Kamchadal without a known Russian admixture	Kamchadal with a known Russian (descendants of ancient Russian immigrants) admixture
Color of eyes, % of dark ones	68.5	45
Horizontal facial profile, average rating	1.35	1.57
Epicanthus, %	32	15
Shape of hair, % of stiff ones	22	5
Growth of beard, average rating	2.02	2.50

Persons with a known admixture of Russian blood are not included in the general table enclosed in this article. The Kamchadal of the Kamchatka River are grouped together in the table with the natives of the settlements of the southwestern coast.

Ka 144 As could be expected the Russianized Itelmen (the Kamchadal proper) are related even more closely to the Russians than those Itelmen who speak their own language. Nevertheless, I have not met a single Kamchadal without a registered Russian admixture, who could not, at the first sight, be distinguished from a Russian. As for the natives of the settlements Tigil', Mil'kovo, Klyuchi, etc., there are among them people who are frequently practically indistinguishable from the Russian natives of the "continent," even though the Mongoloid admixture is reflected in them quite clearly.

Since in almost all their traits the Kamchadal hold an intermediate position between the Itelmen and the descendants of the ancient Russian immigrants, we may presume that before the Russian conquest all the aborigines of the peninsula were anthropologically close to the coastal Koryak, i.e., that they occupied an intermediate position between the Eskimo and the Kamchatka types.

In spite of its small significance the description of the external appearance of the Kamchadal given by Krasheninnikov

Ka 144 ("small beards, Kalmuck type of face, and inclined nose") is applicable more to the Kamchatka than to the Eskimo type.

Ka 144 Ko 144 C 144 Our studies thus indicate that in spite of the presence of the Eskimoid element in the racial composition of the coastal Koryak and the Itelmen, there exist--parallel to them--fairly definite traits of the Kamchatka type. In making a chart for the racial composition of the Kamchatka Oblast we shall use a double cross to indicate a definite prevalence of a given type, a simple cross to indicate the presence of a particular type as one of the basic components, and a vertical line to indicate the existence of a small but still perceptible admixture.

[8] [Table on p. 8:]

Types	Eskimo	Itelmen	Kamchadal	Coastal Chukchee and Koryak	Reindeer Chukchee and Koryak	Lamut	Descendants of ancient Russian immigrants
Eskimo							
Kamchatka							
Paleo-Siberian							
Light Europoid							

The Problem of the Genesis of the Kamchatka Type in the Light of the Conducted Studies

Ka 174 144 Ko 144 The results of the studies conducted in 1947 did not provide a definite answer to the posed question. Both the coastal Koryak and the Itelmen hold an intermediate position between the characteristic representatives of the Kamchatka and the Eskimo types. However, this fact tends to favor more the hypothesis that the Kamchatka type was formed without a

Ka 174 144 Ko 144 Lamut admixture. The conjecture that there is a very small degree of probability that such mixing was significant among the Itelmen preserves its force. As for the Eskimoid or (what in the present case is the same thing) the Americanoid traits of the Itelmen, we must take into consideration the fact that the Kamchatka type is not aboriginal in Kamchatka. It was preceded by the Americanoid proper type, whose representatives did not have the epicanthus. It is little probable that the ancestors of the present-day American Indians--who had at one time lived in northeastern Asia--had not spread out throughout the Kamchatka Peninsula, that all of them had migrated to America, and that new ethnic waves which brought to this area people with Mongoloid traits, found this region uninhabited. One can hardly doubt that the ancient inhabitants of this region assimilated with the later immigrants and left an imprint on their racial characteristics.

It thus follows that while our studies do not lead to a denial of the presence of a Lamut admixture among the Reindeer Paleo-Asiatics, they indicate the existence of the Kamchatka Mongoloid type formed independently of this admixture.

C 174 144 Ka 174 144

The Immediate Tasks of Further Research

Having defined the basic types obtained among the population of northeastern Asia, we must determine the routes by which they penetrated into the given territory. Theoretically, one can conceive of the following routes:

a) from southeastern Asia:
1. over the islands (Japan and the Kurile Islands),
2. over the continent, along the western coast of the Sea of Okhotsk;

b) from Siberia:
1. from the interior regions,
2. along the coast of the Arctic Ocean;

c) back from America.

The last route is possible only in the case of the Eskimo type and is definitely excluded in the case of the Kamchatka type. If we assume this possibility, we must first determine the place of the Eskimo and the Kamchatka types in the racial framework, i.e., we should undertake a detailed morphological comparison [9] of them with other Mongoloids (Siberian and south Asiatic) and also with the American Indians.

Ka 144 1. A similarity of the Kamchatka type to the best-known type of the population of the Siberian interior obtains only in

Ka 144 its relation to the Mongoloid racial stock taken as a whole. The differences in details are quite significant. A comparison with the Lamut was given above. The Alarsk Buryat who were investigated by me in the summer of 1946 (see Kratkie soobshcheniia Instituta etnografii, Vol. 4) for the special purpose of drawing a comparison between them and the Kamchatka type, have a much higher face (136 millimeters in the case of men). The nose having the same bridge height and the same horizontal profile as in the case of the Kamchatka type, is characterized by a smaller width (36.5 millimeters), by less developed nasal wings (average rating of 1.75), and by the less frontal position of the nostrils (average rating of 1.97). Among the Buryat men the convex shape of the nose is encountered more frequently than the concave; among the Buryat women the latter shape of the nose is encountered twice less frequently than among the Reindeer Koryak and the Chukchee women. One must note, however, that the studied group of the Alarsk Buryat had a Russian admixture. In order, therefore, to study the Mongoloid forms of Central Asia free from such admixture, we should organize a study of a few more Mongol and Buryat groups.

000 However, the question of intracontinental relationships of the Kamchatka type cannot be decided in the negative. A small group of the Tungus from the Taz River studied by me in 1941 (see my article about the Selkup in Volume II of the Trudy Instituta etnografii) are characterized by a low (132 millimeters) face, soft hair, a broad (39.6 millimeters) nose, and by a frequently encountered horizontal position of the nostrils. The head of these Tungus is moderately brachycephalic (82), the forehead straight, and the supraorbital area weakly developed. With all this, the epicanthus and the eyelid fold are developed strongly and the face is flat. A further study in this direction and, in the first place, the study of the peoples of the Taimyr Peninsula, must clarify for us the significance and character of these morphological parallels.

000 As for the Eskimo, their specific traits bear no similarity to those of the peoples of Siberia, at least, not of the peoples who inhabit Siberia at the present time. As for the ancient population of Siberia, a detailed craniological comparison of the Eskimo with the Neolithic skulls of the Pribaikal will be undertaken in the nearest future.

Ka 144 2. In addition to tracing similarities existing between the Kamchatka type and the Siberian peoples, we should also turn

Ka our attention to tracing the existence of such similarities be-
● 144 tween the former type and the peoples who live in those parts of Asia lying beyond our boundaries. Resembling the Kamchatka type, combinations of a broad nose with a small size of the face are encountered in South China, Indo-China, Indonesia, on the Philippines and Formosa, and partly in Japan. However, because of the absence of data collected by the same method of observation, the comparison of the Kamchatka type with the south Asiatic Mongoloids becomes an extremely difficult problem.

000 One hundred and twenty-two male Korean inhabitants of the northern provinces of Korea, studied by me with the special purpose of making this comparison, turned out to be more closely related to the Reindeer Koryak and the Chukchee than to the Lamut and the Buryat. The average rating of the incline of their nostrils is 1.71, the protrusion of nasal wings--2.09. A considerable frequency of brown shades of skin coloring (55 percent of No. 10 and darker), moderately developed cheekbones, and small facial height (131 millimeters)--all these traits make for a greater similarity of the Korean and the Kamchatka types, even though this similarity is far from being complete. Specifically, the mandible diameter of the Koreans is not large (112 millimeters), the convex shape of the nasal profile is met more [Tables 1 and 2 on pp. 10-15 and part of pages 16-17 of the original text] [16] frequently than the concave shape. (2). However, from the point of view of racial com-

2. Scientific literature contains indications of the considerable breadth of the lower jaw of the aborigines of Burma.

position the Korean type evidently contains a north Chinese element, so that it cannot be looked upon as a characteristic representative of the south Asiatic Mongoloids.

Ka The difficulties that naturally arise in the course of the at-
141 tempts to organize large-scale anthropological research in
121 southeastern Asia compel us to shift our attention to the
114 craniological materials, especially since scientific literature contains good descriptions of the south Asiatic series. Unfortunately our museums are completely lacking in skulls
C which could be regarded as belonging to the representatives of
[764] the Kamchatka type. The custom of burning corpses, prevail-
Ko ing among the Koryak and among some Chukchee, prevents the
[764] collecting of such skulls. Nevertheless, a specific task of

000 the Koryak of the Karaginsk and the Olyutorsk rayons and the small group of the so-called "Kerek."

Furthermore, it is essential to study again the Tungus of the Okhotsk seaboard, who--according to the data provided by Levin--have some Eskimoid traits.

These projects should include also the Tuguro-Chumikansk, the Zeysko-Bureinsk, and the Aldansk Tungus who up to this time have remained almost completely uninvestigated.

6. At this stage of our work the anthropological data with regard to northeastern Asia are insufficiently related to the data in the fields of linguistics, ethnography, and archaeology --a situation which is to be explained by a relative backwardness of scientific work in these fields in the recent times.

Ko 197 Ka 197 174 144 C 197 If--as Bogoraz thought--the Chukchee, the Koryak, and the Itelmen languages are, in fact, characterized by certain common linguistic features, (4), and if the appearance of these

4. The question is raised, of course, only with regard to the Itelmen language. The relationship of Chukchee and Koryak is quite obvious.

languages in northeastern Asia was connected with the migration from the outside, it is a tenable hypothesis that the migratory flow brought the Kamchatka racial type. The further development of this hypothesis is prevented by the absence of serious linguistic studies about the degree and character of relationship of the languages of northeastern Asia among themselves and with the languages spoken by peoples inhabiting other regions.

Ka 174 The distribution of the Eskimo and the Kamchatka types does not reveal their connection with the contemporary ethnic classification of the Paleo-Asiatic group. [18] It may be presumed that we are dealing here with a trace of a more ancient ethnic demarcation. Does this distribution not reflect the division of the people in question into reindeer raisers and coastal (bank) hunters? Unfortunately, we do not possess any data about the culture of the internal regions of southeastern Asia before the introduction of reindeer raising.

Ka 144 174 The question of chronological appearance of the Eskimo and the Kamchatka types in northeastern Asia cannot, it seems, be based only on the study of the present-day population groups. The Eskimo type, which has preserved some Americanoid traits regarded, not without some foundation, as protomorphic

Ka 144 174 traits of the Mongoloid racial stock, may be regarded as the more ancient of the two types. The morphological peculiarities of the Kamchatka type have undoubtedly been developed at a later date. On the basis of this hypothesis we may presume that the latter penetrated northeastern Asia in the wake of the Eskimo type. However, the distribution of the Eskimo type which inhabits, as it were, the fringes of Kamchatka and of the Chukot Peninsula (Chukotka) indicates a later appearance there of the Eskimo type. And we may furthermore take into consideration, as has already been noted, the possibility of the Eskimo migration back from America.

The determination of chronological relationship existing among different racial types almost always requires the assistance of paleoanthropological data. The fact that such data are lacking not only for Kamchatka, but for the entire Soviet Far East, explains the unsatisfactory tempo and volume of the present archaeological work.

The absence of a relatively exhaustive plan of anthropological research is the greatest obstacle to the ethnological synthesis of peoples inhabiting the shores of the Pacific Ocean. A large-scale organization of archaeological exploration is therefore our most urgent task at the present time.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

the worst roads, and to free themselves very often overturn their driver. 484

The best travelling is in the month of *March* or *April*, when the snow is turned hard or frozen a little at top; however, there is still this inconvenience attending it, that sometimes travellers are obliged to lodge two or three nights in desert places; and it is difficult to prevail upon the *Kamtschadales* to make fire either for warming themselves or dressing victuals, as they and their dogs eat dried fish, and find themselves so warm wrapt in their furrs that they want none; nay, it is surprising to see all the people of this climate bearing the cold so well, that after having slept a whole night very sound they awake next morning as refreshed and alert as if they had lain in the warmest bed. This seems to be so natural to all here, that I have seen some of them lie down with their backs uncovered against a fire, and notwithstanding the fire has been burnt out long before morning, yet they continued to sleep on very comfortably, and without any inconvenience. 484 147 513 147

CHAP. X.

Of the Kamtschadales' *Method of making* WAR. 721

ALTHOUGH before they were conquered by the *Russians*, the *Kamtschadales* did not seem to have had any ambition of increasing their power, or enlarging their territories, yet they had such frequent quarrels among themselves that seldom a year passed without one village or other being entirely ruined. The end of their wars was to take prisoners, in order

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
152 five. I ſhall finiſh this account with a re-
837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

533 The entertainments and aſſemblies of the
535 native Kamtſchadales, at which I was alſo

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

162 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
354 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

these vices occasion frequent quarrels and wars among them
sometimes with their neighbours, not from a desire of increasing 578
their power, but from some other causes; such as the carrying 583
off their provisions, or rather their girls, which is frequently practised as the most summary method of procuring a wife.

Their trade is likewise not so much calculated for the acquisition 439
of riches as for procuring the necessaries and conveniencies of life. They sell the *Koreki* sables, fox and white dog skins, dried mushroons, or such trifles; and receive in exchange cloaths made of deer-skins and other hides: among themselves they exchange 438
what they abound with for what they want, as dogs, boats, dishes, troughs, nets, hemp, yarn, and provisions. This kind of barter 437
is carried on under a great shew of friendship; for when one 576
wants any thing that another has, he goes freely to visit him, and without any ceremony makes known his wants, although perhaps he never had any acquaintance with that person before: the landlord is obliged to behave according to the custom of the country; and bringing whatever his guest has occasion for, gives it him. He afterwards returns the visit, and must be received in the same manner; so that both parties have their wants supplied.

Their manners are quite rude: they never use any civil ex- 576
pression or salutation; never take off their caps, nor bow to one 157
another; and their discourse is stupid, and betrays the most consummate ignorance; and yet they are in some degree curious, and inquisitive upon many occasions.

They have filled almost every place in heaven and earth with 771
different spirits, which they both worship and fear more than God: they offer them sacrifices upon every occasion, and some carry little idols about them, or have them placed in their dwellings; but, with regard to God, they not only neglect to worship him; but, in case of troubles and misfortunes, they curse and blaspheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is so troublesome to them that

175 sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not
669 being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula.
R. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were
177.66 successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

157 The old Kamchadal were proud, independent, inclined to wrath; their passions
761 were easily aroused; they took offense readily and tried to avenge themselves by any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

651 In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropav-
669 lovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts
R. with secretly lifting doors.[1] The Russians were met with simulated pleasure.
177.65 Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

669 Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a
761 tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and now as storehouses.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

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The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

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R.
177.65

The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 357.

142 The true Kamtſchadales are in general below the common height; their ſhape is round and ſquat, their eyes ſmall and ſunk, their cheeks prominent, their noſe flat, their hair black, they have ſcarcely any beard, and their complexion is a little tawny. The complexion and features of the women are very nearly the ſame; from this repreſentation, it will be ſuppoſed they are not very ſeducing objects.

157 578 476 The character of the Kamtſchadales is mild and hoſpitable; they are neither knaves, nor robbers; they have indeed ſo little penetration, that nothing is more eaſy than to deceive them, as we have ſeen in the advantage that is taken of their propenſity to intoxication. They live together in the utmoſt harmony, and the more ſo, it would ſeem, on account of the ſmallneſs of their number. This unanimity diſpoſes them to aſſiſt one another in their labours,

7:Lesseps T-3 (1787-88)1790 Kamchadal

476 bours, which is no ſmall proof of their zeal
157 to oblige, if we conſider the natural and ex-
461 treme ſlothfulneſs of their diſpoſition. An
515 active life would be inſupportable to them; and the greateſt happineſs, in their eſtimation, next to that of getting drunk, is to have nothing to do, and to live for ever in tranquil indolence. This is carried ſo far with theſe people, as frequently to make them neglect the means of providing the indiſpenſable neceſſaries of life; and whole families are often reduced to all the ſeverities of famine, becauſe they would not take the pains of providing in ſummer a reſerve of fiſh, without which they are unable to live. If they neglect in this manner the preſervation of their exiſtence, it is not to be ſuppoſed that they are more attentive to the article of cleanlineſs; it diſplays itſelf neither in their perſons, nor their habitations; and they may juſtly be reproached for being addicted to the contrary

7:Lesseps T-3 (1787-88)1790 Kamchadal

515/157 trary extreme. Notwithſtanding this careleſſneſs, and other natural defects, it muſt be regretted that their number is not more conſiderable; as, from what I have ſeen, and what has been confirmed to me by different perſons, if we would be ſure of finding ſentiments of honour and humanity in this country, it is neceſſary to ſeek for them among the true Kamtſchadales; they have not yet bartered their rude virtues for the poliſhed vices of the Europeans ſent to civilize them.

177/563 It was at Bolcheretſk that I began to perceive the effects of their influence. I ſaw the trace of European manners, leſs in the mixture of blood, in the conformation of features, and the idiom of the inhabitants, than in their inclinations and mode of life, which did not always diſcover any very conſiderable fund of virtue. This ſtriking difference between the inhabitants and

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 virtues, which had been attempted to be
563 ſown, ſcarcely found a reception.

The conſequence has been, that the natives, or true Kamtſchadales, have preſerved almoſt univerſally their ignorant ſimplicity and uncultivated manners; and that a part of the reſt of the inhabitants, Ruſſians and mixed breed, who have ſettled themſelves in the oſtrogs where the governors reſide, ſtill retain indeed a faint ſhade of European manners, but not of ſuch as are moſt pure. We have already had a proof of this in what has been ſaid of their commercial principles, and my conviction has been rendered ſtronger during my abode at Bolcheretſk, by a cloſer ſtudy of the inhabitants, who, this faint ſhade excepted, differ little from the indigenes.

157 M. Kaſloff, and thoſe who accompanied
563 him, in imitation of his example, frequently
177 give

7: Lesseps T-3 (1787-88)1790 Kamchadal

157 give entertainments or balls to the ladies of
563 this oſtrog, who accept ſuch invitations with
177 equal alacrity and joy. I had an opportunity of ſeeing that what I had been told was true; that theſe women, the Kamtſchadales as well as the Ruſſians, have a ſtrong propenſity to pleaſure; their eagerneſs indeed is ſo great, that they are unable to conceal it. The precoſity of the girls is aſtoniſhing, and ſeems not at all to be affected by the coldneſs of the climate.

177 With reſpect to the women of Bolche-
563 retſk, who were preſent at theſe aſſemblies, and who were chiefly either of mixed blood or of Ruſſian parents, their figures in general did not appear diſagreeable, and I perceived ſome who might be conſidered as handſome: but the freſhneſs of youth is not of long duration; from child-bearing, or the painful labours to which they are ſubjected, it fades away almoſt in the flower

7:Lesseps T-3 (1787-88)1790 Kamchadal

dales in general, for the civility with which
157/609 they treated me. I have already mentioned their mild and hospitable character, but I have not been sufficiently minute respecting the instances of regard which these good people gave me, and I recall with pleasure the remembrance of their kind reception. There was not, I believe, an individual chief of any ostrog, that did not make me some trifling present. Sometimes it was a sable or fox skin, and sometimes fruit or fish, and such other objects as they conceived would be most agreeable to me. One would have supposed that they had resolved, by their attentions to me, to repair the injustice which they had so long committed against the French name. They often thanked me for having undeceived them upon the subject; and sometimes again were tempted to regret it, when they considered that they should see me no more, and that it seldom

114 remains of many half-eaten fish lay on the banks. The bears are
136 said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 Sherowmy, or Sherowm,—for the Kamschatkans are fond of
144 clipping the exuberance of their words, and turn Kamakoffskaya
157 into Kamaki,—is a pretty little village of nine houses and forty-
161 three inhabitants, situated on a branch of the Kamschatka River
177 close to its junction with the latter. To the south lie a few acres
361 of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

CHAPTER VII.

000 KAMSCHATKA (*continued*).

We begin the river journey—Our rafts—Bad weather—Werchni Kamschatka—Melcova—A fish curral—Replenish our stores—Melcova church—*Kuklankas* and *parkas*—Extortionate demands of the natives—Curious marl cliffs—Mashura—Rows with the people—Leprosy—Piles of driftwood—Onset of the cold weather—Tschappina—We sight the great volcanoes—Our camp-life—Wild fruits—Renewed quarrels with the natives—An awkward dilemma—We win the game.

157/576 On the morning of September 1st our horse-boys departed on their return journey to Petropaulovsky. Whether it is owing to the depression peculiar to the country, so enlarged upon by Kittlitz, I cannot say, but there seems to be an utter lack of geniality among these people. They took their wages resignedly, and bade us an unceremonious adieu. Handshaking—the kindly custom in Scandinavia and other nothern countries on the termination of an engagement between master and man—appears to be unknown in Kamschatka. Perhaps after all it was better, for I do not suppose that any of us felt any great degree of affection for Vodki, and at a later period of our journey, fist-shakings would have better expressed our feelings towards the greater proportion of the people with whom we were brought in contact.

Having despatched a letter to the yacht with instructions as to the date of departure for the rendezvous at the mouth of the river, we went down to the stream to make the necessary preparations
322 for our voyage. The only species of boat used in the interior of
501 the country is the dug-out canoe,—a clumsily-shaped craft made

24: Lansdell-639 M-2 (1879) 1882 Kamchadal
116, 157, 262, 574, 576

" The Kamchatdales are a people of much amiability and honesty. Their houses are always open to the stranger, whom they never weary of waiting upon, and from whom they soon forget an injury. (1)

1. Their hospitality is carried even to excess. They visit one another, for instance, during a month or six weeks, until the generous host, finding his stock exhausted, gives the hint by serving up a dish called 'tolkootha', a hodge-podge, composed of meat, fish, and vegetables; upon which the guests depart the following day. "

27: Sauer--308-309 T-2 (1789-93) 1802 Kamchadal
116, 157, 273

"They are an honest and hospitable race of men, extremely fond of music and of brandy. One of them, who constantly accompanied me in my aquatic excursions, and expended every farthing of his money in brandy, I one day saw coming to my habitation; and, to tempt him, I hid myself in an adjoining [309] room, leaving a glass of brandy upon the table, and a bottle half full close to it, with some sea-biscuit. He came in, saw nobody, and called me, but obtained no answer. Upon which he advanced to the table, and smelt to the glass: 'It is brandy,' said he, 'but I will not drink; and the bottle 'half full; well, I won't taste you; but I'll go and seek master, and scold him for leaving 'you in this manner. I'll just smell again, and go.'--I stepped out of window into the garden, and went to meet him: when he accosted me in the following manner: 'I have 'been into your room and saw a glass full of brandy; perhaps you won't believe me, but 'indeed I did not taste it.' -- 'I dare say you did.'--'No, by G--, I did not: I knew you 'would not believe me; but a Kamtshadal will never take anything without permission.' --'Well, I must believe you; will you come and drink it?'--'Yes, that I will; but I 'wanted to scold you for leaving it so.' "

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 131 the natives *Kuſhi*, and by the *Ruſſians Kuriles*. The exact number of thoſe iſlands cannot be aſcertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the ſouthernmoſt iſlands, and from the *Japaneſe*, who were driven by diſtreſs of weather upon the coaſt of *Kamtſchatka*, they are reckoned to be twenty-two. Perhaps they do not take the ſmall ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the ſaid captain found it difficult to give them *Ruſſian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay neareſt to *Matma Kunatin*, were allowed to keep their former appellations.

133 136 161 651 *Schumtſchu* is the neareſt iſland to the *Kurilskaya Lopatka*, and extends in length from the north-eaſt to the ſouth-weſt 50 verſts, and in breadth about 30. This iſland is full of mountains, out of which, as alſo from the ſmall lakes and marſhes, many little rivers run into the ſea. In ſome of them are found different kinds of ſalmon, and ſeveral other fiſh, but not in ſuch plenty as to furniſh the inhabitants with proviſions for a winter. Upon the ſouth-weſt point, near the ſtreight that is between this and the ſecond *Kurilskoy* iſland, are three *Kurilskoy* ſettlements, that contain only 44 inhabitants; ſome of whom pay the taxes in ſables and foxes, but the majority pay them in ſea-beavers' ſkins.

The inhabitants of this iſland, as well as thoſe of the *Kurilſkaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtſchadales*: for ſome diſſentions having ariſen between the inhabitants of that nation, ſoon after the *Ruſſians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the ſecond iſland, whoſe particular cuſtoms they have adopted, and from thence have received the name of *Kuriles*.

The

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding, agriculture, etc.) show a marked increase in population. But these groups do not
177 include the Kamchadal. On the other hand the latest investigators of Kamchatka,
609 the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Vulcane, Bären und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–180. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 40–62 (in Russian).

1. [i.e., a decline in population due to Syphilis, etc. --Analyst]

342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1] 1

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not as high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 188). The storehouse on posts is known everywhere in Siberia, as well as in North America.

1. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 respects they are not distinguishable from the indigenes, but by their features and idiom.

161/361 With respect to the Kamtschadale village, which forms a considerable part of the place, and is situated, as I have already said, upon the narrow projection of land which closes in the entrance of the port, it is at present composed of from thirty to forty habitations, including winter and summer ones, called *isbas* and *balagans*; and the number of inhabitants, taking in the garrison, does not exceed a hundred, men, women and children. The intention is to increase them to upwards of four hundred.

13 To these details respecting the port of St. Peter and St. Paul, and its destined improvements, I shall add a few remarks upon the nature of the soil, the climate, and the rivers.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926–27 set
● 161 the number of Itel'mens at 814.

The term Itel'men means "resident," "living man." In the documents
101 and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

6:Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

7:Lesseps T-3 (1787-88)1790 Kamchada'

000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

161 The oſtrog of Machoure, before the in-
361 troduction of the ſmall-pox, was one of the
756
609 moſt conſiderable in the peninſula; but the
797 ravages of this cruel diſeaſe, have reduced the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

18: Yarmolinsky--3 L-4 (no date) 1947 Kamchadal
161

"Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen."

24: Lansdell-638 [2] M-2 (1879) 1882 Kamchadal
116, 133, 161, 226, 361

" The number of the Kamchatdales, strictly so called, is estimated at 3,000. Their capital is Petropavlovsk, the only town on the eastern coast of the peninsula.(1)

1. It is situated on the right shore of the splendid Bay of Avatcha, which may claim with Rio Janeiro and San Francisco to be one of the finest harbours in the world. It is perfectly protected from the winds, and, transplanted to a more favourable position, it might be one of the greatest of markets; but since the fishery of the whale in the surrounding seas has lost its importance, Petropavlovsk has sunk from a place of 1,000 inhabitants to one of 500. Mr. Dobell, who lived in the peninsula five years, says that he found there many dykes and mounds, from the existence of which he argues that the country was once thickly populated."

22: Guillemard T-2 (1882) 1886 Kamchadal

000 onlooker it would seem as if we were deliberately beaching the vessel. "Starboard! hard a-starboard!" comes the order. "'Ard a-starboard," echoes the man at the wheel. "Hard a-port!" "'Ard a-port it is," he sings out, clawing the wheel towards him with foot and hand. "Well! I'm blessed if ever I see the likes of this 'ere place," I hear Jack mutter as we are safely berthed, and, on the whole, I am very much inclined to agree with him.

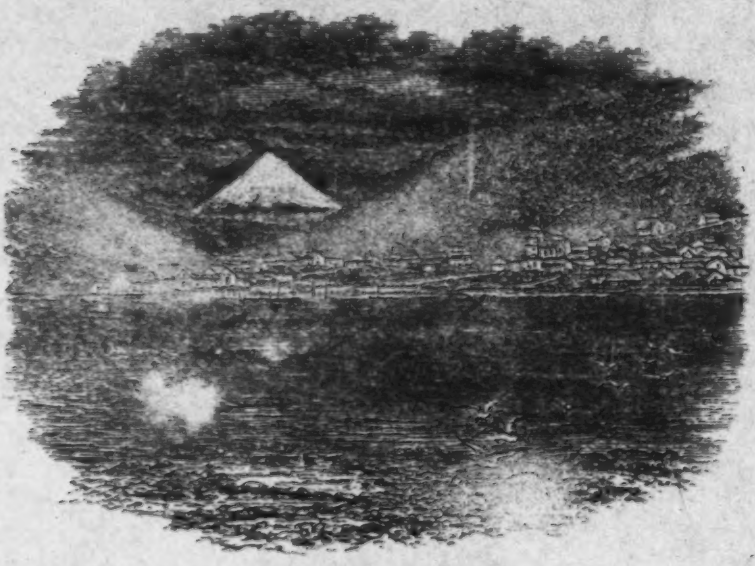
505 Our arrival created no little excitement among the inhabitants of this remote little spot: it might possibly have created even more had we not entered the harbour almost at the moment of departure of the yearly fur steamer for Japan *viâ* Okhotsk. All Petropaulovsky had assembled to wave their adieux, and not a few of them appeared torn by the conflicting desires of seeing the last of their friends and of discovering the business of the new-comers. 161 The steamer was hardly under way before we were receiving our 361 visitors. They were but limited in number. Petropaulovsky, in 342 spite of the imposing letters to which it is treated in the maps, is, after all, little more than a hamlet, and is probably stationary, if not actually decreasing, with regard to population. Clerke, in 1779, found the settlement consisting of thirty huts built upon the sand-spit to which I have already alluded, and consisting mostly of yourts or balagans.[1] Captain Cochrane, who in 1821 performed the unprecedented feat of walking across Siberia from Russia to Kamschatka, describes it as having increased to fifty-seven buildings, some of which were on the mainland; and at the period of the Crimean war it appears to have been as large as it is at the present time, if not actually larger. The town had been transferred to the head of the little harbour, where it now stands, and boasted of no less than two hundred edifices of all kinds. But in Kamschatka, as in other northern countries, winter storehouses, fish-drying sheds, and other out-buildings are so numerous, that the actual dwelling-

[1] A yourt is a semi-subterranean winter dwelling, roofed with turf. The balagans are only used in summer: they are rough wooden buildings erected on piles. The upper part serves as the dwelling-house, while, beneath, the salmon are hung up in rows to dry.

22: Guillemard T-2 (1882) 1886 Kamchadal

361 houses may be reckoned at about one-third of that number. Kittlitz,
161 in 1829, found the settlement to number about two hundred inhabitants, and at the time of our visit we were informed that there were over three hundred; a number that I should myself be inclined to think overstated.

133 Standing on the now deserted sand-spit,—the natural break-
361 water of the harbour,—the view of the little town and its surrounding-



PETROPAULOVSKY HARBOUR.

ings is strikingly picturesque. To the left is the wooded promontory, the scene of the unfortunate disaster which occurred to the forces of the Allied Fleet in 1854. On the right a hill of some fifteen hundred feet dominates the town, whose log huts are clustered around the shores of the little bay. Here and there a white-painted house of greater pretension strikes the eye, and a stunted grove of trees shelters the church, and the graveyard studded with Russian crosses. Behind the town, artistically filling in the gap

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the
793 western side of the peninsula. The Gunalians are all Christians, and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1737, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

[see page 74--Analyst]

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remains of many half-eaten fish lay on the banks. The bears are said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

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Sherowmy, or Sherowm,—for the Kamschatkans are fond of clipping the exuberance of their words, and turn Kamakoffskaya into Kamaki,—is a pretty little village of nine houses and forty-three inhabitants, situated on a branch of the Kamschatka River close to its junction with the latter. To the south lie a few acres of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kams-
. 72 chatka River that is marked on the English chart of the country. In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

22: Guillemard T-2 (1882) 1886 Kamchadal

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Emerging from the eastern entrance of the narrows we found ourselves passing through a flat, uninteresting plain which extended as far as the sea. Here the scenery is scarcely more interesting than that at the mouth of the Thames. A cold wind swept over the dreary reaches of the river, and behind us an ink-black sky gave warning of approaching bad weather. At 4 P.M. we passed Nischni or Lower Kamschatka, once the capital of the peninsula, a village of some importance with twenty houses and a church, and a population of 150. It lies a little way off the main river upon a smaller stream, and just opposite, upon the other bank of the Kamschatka, the Raduga, a river about forty yards wide at its mouth, flows in
000 from the south. A canoe shot out to intercept us as we passed, bringing a letter for Petropaulovsky from the Kluchi pope, who had left that village just before us on the preceding day, and shortly afterwards we saw another boat paddling hard after us. We stopped to let it approach, and soon recognised Jacof, whose gloomy face told us that Verglaski had not been found. He had apparently gone down the river for some distance, and had then turned back and proceeded towards Kluchi. Here the track had become obliterated, and Jacof had been obliged to give up the search. Poor old Verglaski; his quiet methodical ways had endeared him to all of us, and Jacof was much distressed at his loss. In the summer he would have had no difficulty in finding enough to subsist on, but at this season hardly any fish were left, and the settlements being so far apart, and upon the other side of the river, it was more than doubtful if he would ever have a chance of reaching one of them.

Paddles were once more resumed, and we were discussing the advisability of proceeding to the mouth of the river without stopping, when we perceived the smoke of a steam launch in the distance. By our glasses we soon made her out to be a stranger, and all doubts as to the arrival of the *Marchesa* were thus at an end. She proved to be the launch of the walrus-schooner *Nemo*, bound to Nischni Kamschatka. She had on board the first officer—

27: Sauer--293 T-2 (1789-93) 1802 Kamchadal
116, 161, 361

"I have already mentioned the situation of the town Neizshnoi Kamtshatka, which contains 80 isba's, or houses, with two churches; and its number of inhabitants, including children, 548 souls; latitude 56° 33'."

27: Sauer--293-294 T-2 (1789-93) 1802 Kamchadal
116, 161, 361 Russia
636.71

"The villages on this coast [CMC: i.e., the western coast of Kamchatka] are, Tigilsk, Itshinsk, and Bolshoiretsk (situated on the Tigil, Itsha, and Bolshoia rivers). Of these the former is the most considerable, containing 45 wooden houses, and one church. The Russian charts place it in latitude 57° 55'. This, which they call a fortified town, is surrounded by wooden palisades, and was built in 1752. The num-[294]ber of inhabitants are 338, including women and children. Itshinsk also contains a church, and about 10 houses, with 50 inhabitants. Bolshoiretsk contains 37 houses, and the total number of inhabitants are 235. Beside these, there are eight inconsiderable villages, containing each three or four houses, on the west coast."

27: Sauer--298 T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 137, 161

"Near the mouth of this harbour [CMC: of Tareinsk in Avacha Bay], on its north-west borders, is a valley forming a plain of about one mile and a half square, well wooded with good sized birch trees: a situation which Major Behm thought the most eligible of any hereabouts for a town. North and south are lofty mountains of easy ascent, covered with trees to their summit. The valley is bounded to the west by a fresh water lake of about 15 miles in circumference, well stocked with fish all the year through; while its borders abound in different kinds of berries, sarana, tsheromtsha (a kind of wild garlick), and a variety of pot herbs. This lake is the chief source of the river generally known by the name of the Paratounca, of which I shall shortly give an account, as also of the other rivers. The remains of numerous villages in the vicinity of this lake strongly indicate the former popolousness of these parts; but they are at present overrun with bears, wolves, and hares."

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-1-2
116, 161, 563, 651 Russia
636.65

"The number of inhabitants may be stated as follows, men, women and children:

At the town (Neizshnoi) - -	548
Ostrog Tigil - -	338
Virchnoi - -	226
Bolshoiretsk - -	235
And at the harbour of St. Peter and St. Paul - -	85
Colonists - - -	255
Russians - - -	1687
Kamtshadals - - -	1053
Total - - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the list of those who are tributary, according to the revision [307] made during the government of Mr. Reinikin, who succeeded Major Behm. The revisor (in 1784), by some unaccountable mistake, has frequently noted the name of one and the same person as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonstrances, but in vain: this imposition, however, is the least

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-2
116, 161, 563, 651 Russia
636.65

of their sufferings. They are compelled to pass the greater part of their time in procuring necessaries for their visitors. The governor makes his annual circuit round the peninsula, and receives a present from every individual; the captain of the district goes his rounds twice; different deputations from the courts of justice, soldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horses are quartered at each village, and the inhabitants must provide a stock of hay for them. Thus the Kamtshadal scarcely finds time to collect a supply of food in the fishing season for his own family."

28: Sarytschew--61 T-1 (1789-90) 1806 Kamchadal
116, 133, 161, 361

"On the Koschka [CMC: a jutty of land at the entrance to Petropavlovsk harbor; see category 133, this source, pages 60-61] there are eight dwelling-houses, interspersed with several buloganen; or log-houses, and on the north shore of the haven are four, together with a wooden building for an hospital, and the store-houses built during the expedition of Commodore Behring, which are still in good condition. The number of the inhabitants is limited to eleven Kamtschadales, one ensign from the army, and 23 Kosaks. The country around the haven is mountainous, but the north and east sides have sufficient level ground for 300 houses."

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 ter which, on a beautiful frosty moon-light morning, I resumed the journey over a picturesque and mountainous country, well wooded and watered. Late at night we reached a small place called Apachinsk, forty-five miles. Ere we arrived we had to cross the river called Bolshaya in a canoe, the river not being frozen, a circumstance at this time of the year very
361 rarely known. Thirty-miles farther we reached the
161 ancient capital of Kamtchatka, Bolcheretzk, now a small village containing fourteen dwellings, one hundred and sixteen inhabitants, and about thirty
000 balagans, i. e. sheds for drying fish. The path to it was over a flat level along the river. I was myself the driver towards the abode of my now father-in-law, whose homely manners, numerous, healthy, smiling children, and hearty breakfast, made ample amends for the fatigues of the last two days.

Bolcheretzk stands on the river of its own name, about fifteen miles from the sea of Okotsk, and has little to boast of at present but the affectionate remembrance the inhabitants bear to the memory of Major Behm, so highly spoken of by Captain King. I heard, also, strange stories of the celebrated Benjofsky, who made his escape hence to Canton, having previously murdered some people, and fomented an insurrection. I heard nothing in his favour, although an old lady, afterwards my aunt,
563 was a companion of his. I found Bolcheretzk to be inhabited by a civil people, all Russians: but
000 were it otherwise it might be expected I should

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 those I had, and then proceeded upon my journey, reaching by midnight Kickchick, twenty miles, a place of equal wretchedness with the last, and like it containing but fourteen or fifteen inhabitants, most of whom are disabled from work by disease. With the same dogs I reached Kolofsky ostrog thirty miles along the sea coast, upon which a tremendous surf was roaring with a strong northwest wind. There are in the neighbourhood several fine lakes which never freeze, and produce trout and salmon peal of a fine flavour during the whole of the winter. Deer, mountain sheep, and game of every description that is found in the Peninsula abound in the mountains and forests, and fine meadow lands every where skirt the coast.

133 I remained to take tea with the old Toion, whom
563 I found to be a fiddler and a scholar, and depart-
361 ed for Vorofskoy ostrog, forty miles. The mountains now approached nearer to the sea-coast, and present some beautiful scenery. I put up at the abode of a wealthy Russian farmer, and felt highly gratified
161 in observing a small but fat herd of cattle. This is
361 considered a rich spot, yet it contains only nine
133 dwellings with about forty inhabitants, not enough to keep up the chase. The place is prettily situated on the Vorofskaya river, about four miles from the sea. There is a snug harbour at the mouth of the river, where the transports from Okotsk formerly visited, and the river is navigable to the village which retains the vestiges of a small fortress. The meadow lands about it are at once

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 extensive and luxuriant. The inhabitants provided
361 me with frozen fish, a delicacy I had so much en-
161 joyed on the Kolyma, with ducks and rein-deer meat, as also with dogs to resume the journey, which carried me to Kolpakofskoi ostrog, thirty miles, along a dreary sea beach. The village contains six dwellings and twenty people, who furnished me with dogs to Kroutogorova thirty miles further, a beautiful situation near the extremity of the almost level plane reaching from hence to Bolcheretzk. The famous Sopka, i. e. burning mountain, near Tchinsk, here becomes visible, and although the country is so rich, not a head of cattle is to be met with from Vorofskaya.

To Tchinsk are thirty miles of superior country, yet so deep in snow that we were obliged to take it by turns to go a head with snow shoes, at other times the government of a narte was thrown upon me, which I at first made but a bungling hand of. Tchinsk has twelve dwellings, it is consequently a considerable place! there are also two priests, brothers, whom I found drinking a
576 decoction of dried herb instead of tea. I felt angry with the Toion who had let slip eight dogs intended for me, and declined entering his dwelling, the strongest mark of displeasure which can be shown to these simple people. The poor fellow felt the slight so severely as he saw me entering another yourte, that I could not help regretting the deter-
361 mination I had made. To Soposhna it is thirty-five miles, which I travelled in company with the

29:Cochrane T-2 (1821-22)1824 Kamchadal

361 reverend pedlers, for every body here is a mer-
161 chant. I made them happy by a pound of tea, a
133 few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

487 At midnight I continued on for Kovranskoy os-
R trog, twenty-two miles. There is here a law oblig-
177 ing the Toions to have a path made within twenty-
.48 four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

487 quently was obliged to go before upon his snow
R shoes; and such was his diligence from fear of re-
177 prehension, that he not only arrived before me, but
.48 arrived in five hours, a very short time to accom-
plish such a journey upon snow shoes. I found it
the most miserable place I had seen for a long
period, reminding me of Zashiversk in northern
Siberia. The brows of the hills are covered with
brush wood, with little other appearance of nature.
133 From hence to Uskolofskoy ostrog are thirty-five
161 miles, which I was obliged to do by walking and al-
361 ternately driving a narte, and cannot say which of
the two is the most fatiguing. The diseases preva-
lent in the place prevented almost any assistance
being rendered us. There are no cattle, yet fine
meadow lands. Fish and game are abundant. At
this place I met with another old shipmate in the
person of the brandy contractor, who accompanied
me to the next station, Napanas, a village with six
dwellings and forty people. The road leading to
it is considered dangerous, owing to a large toondra
or swampy desert which must be crossed; the dis-
000 tance is forty miles. We passed the desert in a slight
fall of snow, which had not been sufficient to obliter-
ate the marks of the track, else we must have been
compelled to halt whenever the snow overtook us.
I did not arrive until two o'clock in the morning,
having been previously hurled down a snowy de-
clivity of one hundred feet in depth: at the bot-
tom of which, I, guide, dogs and narte all lay hud-
dled together; however vexed I felt inclined to

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer, but its situation in winter is exposed and dreary. A range of mountains from the NE to the SE defend it in some degree from the coldest winds, yet it is on the whole but a poor place. There are at present twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word comprehending Siberian fortresses, says, "It would be dangerous to attempt storming them, for whoever wanted to mount the greatest and only bulwark, a wooden paling, would most probably come to the ground with the whole structure about him." Such I am certain is the present state of Tygil, and which, with its half dozen Cossacks, can only be held *in terrorem* over the neighbouring Koriaks: the Kamtchatdales are not a people numerically or physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hospital erected; when they are to be covered in I know not, though shortly I hope, for they are much wanted. The ravages of a certain disease at this place are indeed dreadful, and I should think ought to call forth the attention of the govern-

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 part of the evening we reached the Yelofka river, which unites not far hence with the Kamtchatka, running in a picturesque manner through the coun-
361 try. At seven we reached the ostrog of Yelofka,
161 fortunate in having crossed the mountains so safely.
133 Yelofka is a pleasant village of eight dwellings and forty-six people, the country round it is elevated and well wooded. We remained only a few hours to refresh ourselves, and then continued the journey along the river of its own name, the banks of which afford some beautiful scenery for about fifteen miles. We then came to a desert which we crossed in a purga, fortunately not very heavy. At forty miles we reached the village of Khartchina of
000 five dwellings and thirty inhabitants. I was welcomed to it by a respectable looking old man, a priest, son to the highly eulogized priest of Paratounka. The son perfectly well remembered Captains Cook and Clerk; he having been at that time a young man, living with his father at the village of Paratounka. Several uninteresting anecdotes were related of them, as also of Perouse, in their rambles of shooting or chasing the wild animals. I had at Yakutsk been recalled to the remembrance of Captain Cook by a silver watch, which now belongs to Captain Minitsky, of the Russian navy, and which, I think, is spoken of somewhere as having been given away by that great navigator to some individual merchant. He probably disposed of it, and thus at last it has fallen into the hands of the pre-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

29:Cochrane T-2 (1821-22)1824 Kamchadal

563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

29:Cochrane T-2(1821-22)1824 Kamchadal

164 havoc the introduction of the small pox, and an-
other distemper, made at the ostrogs on the banks
000 of the Kamtchatka. Remarkably fine and extensive meadow lands, attend the traveller all the way from Cliuchie to Kozerofsky, as well as noble forests of timber; and there are seasons when cattle might maintain themselves during the whole of the winter, the snow being then of no great depth; yet there are but few heads of these necessary animals. The scenery to the southward along the banks of the river, is also of the most picturesque and sublime appearance. The magnificent peak soaring to the clouds has a fine effect when viewed from the bed of the river.

361 Kozerofsky, forty miles beyond Oushkielova,
161 contains five dwellings and thirty-six people, and is pleasantly situated. I continued along the river Kamchatka for twelve miles, and then along that of the Tolbachinsk to an ostrog of the same name for thirty miles more. The latter part of the journey was through a crowded forest, and a thick fog, which occasioned me some serious blows, as the dogs made their rapid progress; now and then starting at the scent of a fox or sable. Tolbachinsk is a pretty little village with thirty inhabitants, and appears to be on the improvement; the establishment is a new one and almost secluded from the world. Stchappinat was the next village I came to. It is upon the Kamtchatka, at a deep and narrow part of the river which was not yet frozen

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of scrofula is become hereditary. In this part of the peninsula the chase is scarce, and the inhabitants mostly subsist upon fish, a few mountain sheep, and wild rein-deer, being the only meat they taste from one end of the year to the other. The situation is fine and highly productive in fish, but at this moment there are not a sufficiency of people to transact the ordinary business; a circumstance which calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous country, which is more than compensated by the succeeding richness of a valley eighteen miles in length. I crossed several times the Bistra, a rapid stream, uniting with the Bolshaya Reka, and was again obliged to become pilot, chief, and dog-master; however, I managed very well, and arrived early. Malka is deserving of little notice, yet is said to be celebrated for its baths! The situation is magnificently grand; the hospital stands in the bosom of a lofty chain of elevated mountains at two miles from the village. I was welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
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563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters will be found, who will prefer to administer justice with clemency and honor, to the degrading of their characters by a mean and derogatory traffic. If an increase of rank, double pay and provisions, an extra pension, and the most unlimited powers are not sufficient to ensure a just discharge of the duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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1: Kolarz J-4 (no date) 1954 RR1 Siberia
Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the paleolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no paleolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotak, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnoye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saltories bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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when they use it in their ragouts, it is previously boiled. Brandy is also distilled from this sweet herb, which, as I observed before, is sold on account of government: for this purpose the plant is purchased of the Kamtschadales*.

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There are three sorts of inhabitants, the natives or Kamtschadales, the Russians and Cossacs, and the descendants from intermarriages.

The indigenes, that is, those whose blood is unmixed, are few in number; the small pox has carried off three fourths of them, and the few that are left are dispersed through the different ostrogs of the peninsula; in Bolcheretsk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is sure to be extremely agitated during the night, and to feel the next day as melancholy and restless as if he had committed some crime.

The

29:Cochrane T-2 (1821-22) 1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

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793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
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162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

29:Cochrane T-2 (1821-22)1824 Kamchadal

162 ing degree is a question I shall not answer, farther than by reminding my readers that at the discovery of Kamtchatka, we are told in the Russian history, that no less than one hundred and sixteen villages
164 were on the banks of the river Kamtchatka. The
162 small-pox, and its rival distemper, with other diseases, and above all the spirit of persecution which has been unremittingly practised towards these poor people, have been the several causes of the depopulation. Of late, however, I can with certainty say the population has not decreased; this may be owing to the benefits arising from vaccination, as well as somewhat better medical attend-
162 ants. But although population has of late kept its
563 maximum, it may be a question whether the aborigines have not decreased in the same ratio that the Russians and convicts have increased. At present there are several Yakut as well as Russian exiles, in the peninsula, neither of whom can be of much benefit; but both assisting to persecute and plunder the Kamtchatdales.

175 Of the history and origin of the Kamtchatdales little positive has ever been known; and that only for the last one hundred and thirty years. Kamtchatka is supposed to have been visited by some Russians in 1649, when one of the traveller Deshneff's vessels, was wrecked on its coast. Those Russians lived with them in peace for a considerable period of time; but quarrelling among themselves were murdered. Nothing more is known of the place

Ka 101 population of the area. The ethnonym "Russian" is used in everyday speech to refer only to the natives of the central areas of the RSFSR or of Siberia. Its equivalents are the Lamut (basically Yakut?) term "nyucha" and the Reindeer Koryak term "mel'khitan" (now becoming obsolete). The descendants of the ancient Russian population of Tigil', Mil'kov, etc., together with the Itelmen (both the Russianized ones and those who preserved their own language) and the coastal Koryak, are referred to in the Lamut language by the common term "kheek" (plural "khayakyl") and in the Reindeer Koryak dialect by the term "nymyllon."

Ka 144 An especially strong racial mixture are the inhabitants of the Kamchatka River valley where the Kamchadal and the Russian villages follow one another throughout the valley's length. It seems that under these conditions all the native inhabitants who speak Russian should be looked upon as a homogeneous whole. However, such is not at all the case.

Altogether 182 people who spoke the Russian language and called themselves Kamchadal were studied in the Kamchatka River valley. If in the use of this ethnonym one encounters discrepancies caused by the current official usage, these discrepancies arise both in the case of the native Russian and of Ka 162 the Kamchadal proper settlements. The 1897 census indicated that there were there 103 persons both of whose parents were descendants of the old Russian settlers; that the persons whose parents were Kamchadal proper were 41 in number; and that there were 38 persons born of mixed marriages. A simple calculation shows that as a result of free intermarriages there must actually have been 87 Russians, 17 Kamchadal, and 78 persons of mixed stock. The intermarriages can hardly be explained by the [7] former social stratification of the population. They are rather to be explained by the territorial arrangement that members of different groups have. However, this racial mixing has been taking place already for a number of generations, and in addition the inhabitants of Kamchatka frequently change their place of residence. Although the number of our observations was small, the counting of the medians and of frequencies of all the basic traits indicates that differences between the so-called "pure" and the so-called "mixed" Kamchadal have been preserved.

Ka 142 Below is a small table composed only for the Kamchatka River valley. The figures are averages for both sexes (with

[This chapter is a summary rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2.]

CHAP. XVII.[1]

163 *Of the* BIRTH *of their* CHILDREN.

IN general these people are not fruitful, for I could never learn that any one man had ten children by the same woman. Their women, as they say, have commonly very easy births: 844 *Steller* was present at the delivery of one of these women, who went out of the hut about her ordinary business, and in a quarter of an hour afterwards was carrying her child in her arms, without any change in her countenance. He likewise relates, that he saw another woman who was in labour three days, and to his great 843 surprise was at last happily delivered of a child, which came double, presenting the hips first. The conjurers attributed the occasion of this unnatural posture to the father, who in the time that the child ought to have been born was employed in making sledges, and bending the wood over his knee. Such ridiculous 844 causes do they assign for every uncommon effect. The women are delivered upon their knees, in presence of as many people as are in the village, without distinction of age or sex. They wipe the new-born child with tow, and tie the navel-string with thread made of nettles, and then cut it with a knife of flint: they throw the placenta to the dogs. They put chewed epilobium upon the navel, and wrap the infant in tow instead of swaddling cloaths: then every one caresses it, taking it in their arms, kissing it, and rejoicing with the parents. This is the only ceremony which they use. They can hardly be said to have professed midwives, and for the most part the mother or nearest relation performs the office.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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The women of this country have ſeldom more than ten children, the common eſtimate is four or five, they bear none after the age of forty. They aſſiſt one another in their deliveries, which are effected with great facility: meanwhile there are midwives in Kamtſchatka, but their number is very ſmall. The accidents which prove fatal to ſo many mothers, are much leſs frequent to theſe women, than inſtances of child-birth in the open air, in roads, or wherever their occupations call them. On

mountebanks. Similar in their impoſtures, their reign and their fall are ſimilar. Various reflections might be made on this ſubject. That a people equally ſimple and uninformed, like the Kamtſchadales, ſhould for a time have been the dupes of the impoſtures of their magicians, is not aſtoniſhing, and will admit of an excuſe: but that ſuch extreme ignorance and credulity ſhould be made ſenſible of their error, and bluſh at it, is a matter of ſurpriſe and congratulation; for even with the moſt enlightened nations of Europe, do not ſome kinds of chamans ſpring up every day, equally perfidious and deſtructive! They have all in the mean time their apoſtles, their proſelytes, and a prodigious number of martyrs.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The women, as was mentioned above, who desire to have children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs and different conjurations to prevent conception. Their superstition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES.

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

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757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 757 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 844 278 The women uſe ſea raſberries ‡ to haſten their delivery; and alſo a ſort of coral, which they make into powder like crab-eyes, in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Impetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

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	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	5.4	1,495 mm.	4.6
Length of head	188 mm.	6.8	153 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding, agriculture, etc.) show a marked increase in population. But these groups do not
177 include the Kamchadal. On the other hand the latest investigators of Kamchatka,
609 the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Vulcane, Bären und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–180. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 40–53 (in Russian).

1. [i.e., a decline in population due to syphilis, etc. --Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ing, and we were treated with the utmoſt hoſpitality; but we had ſcarcely entered when the rain fell in ſuch abundance, that we were obliged to ſtay longer than we wiſhed.

I eagerly embraced this ſhort interval to deſcribe ſome of the objects which I had deferred till my arrival at Bolcheretſk, where, perhaps, I may find others that will not be leſs intereſting.

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133 The oſtrog of Paratounka is ſituated by the ſide of a river of that name, about two leagues from its mouth *. This village is ſcarcely

Peter and St. Paul; but this cannot take place till the projected improvements reſpecting the port are carried into execution. We cannot help obſerving, that the Engliſh have omitted to mention that there was formerly a church at St. Peter and St. Paul's, and that its ſituation is known by means of a ſort of tomb which formed a part of it.

* This river empties itſelf, as I have already ſaid, into the bay of Avatſcha. The ſhoals, which are commonly

7:Lesseps T-3 (1787-88)1790 Kamchadal

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ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavlofska*.

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The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

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7: Lesseps T-3 (1787-88)1790 Kamchadal

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The ſmall pox, whoſe ravages I have already mentioned, appears not to be natural to the country, nor is it very common. Since the invaſion of the Ruſſians, and the frequent emigrations that ſucceeded it, this epidemical diſeaſe has only made its appearance in 1767 and 1768. It was then brought into the country by a Ruſſian veſſel bound to the Eaſtern iſlands, for the purpoſe of hunting otters, foxes, and other animals. The perſon, who had in his blood the fatal germ, was a ſailor from Okotſk, where he had taken remedies for the diſorder, previous to his departure; but the recent marks of it were viſible. Scarcely landed, he communicated this cruel malady to the poor Kamtſchadales, which carried off three fourths of them. As it has not appeared ſince, it is ſuppoſed that theſe people are not ſubject to it. In the year 1720 it broke out in the northern part of Kamtſchatka, but it did not ſpread ſo far as the peninſula.

7:Lesseps T-3 (1787-88)1790 Kamchadal

164 peninſula. It began at Anadirſkoi; it is
278 not known how it was brought there,
757 though the Ruſſians are alſo accuſed in this
inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed
births. Such as are deformed among them,
have become ſo in conſequence of a con-
ſiderable fall, though this is not a very com-
mon occurrence, as they are accuſtomed to
fall from their balagans. They are but

7: Lesseps T-3 (1787-88)1790 Kamchadal

They ARE BUT
164/757 little ſubject to the ſcurvy; their uſe of wild garlic, and various fruits and berries, is a preſervative. The Ruſſians and other ſettlers are more frequently afflicted with this diſeaſe.

Conſumptions are frequent enough; but boils, tumors, abſceſſes, and wens, are very common. They have no mode of curing them, but by inciſion or extirpation; and they uſe for theſe operations a knife, or perhaps ſimply a ſharp ſtone, which ſupplies the place of a lancet. Such inſtruments are calculated to impreſs us with no very high opinion of the ſkill of the operators; and it is obvious that the art of ſurgery, brought to ſuch perfection with us, is in a ſtate of the utmoſt barbariſm at Kamtſchatka.

178/756 Phyſic does not appear to have made a greater progreſs; though it muſt be confeſſed

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

22: Guillemard T-2 (1882) 1886 Kamchadal

133 361 484 Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some 000 moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

142 144 164 177 361 Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

22: Guillemard T-2 (1882) 1886 Kamchadal

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of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

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If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
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"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

29:Cochrane T-2 (1821-22) 1824 Kamchadal

164 havoc the introduction of the small pox, and another distemper, made at the ostrogs on the banks
000 of the Kamtchatka. Remarkably fine and extensive meadow lands, attend the traveller all the way from Cliuchie to Kozerofsky, as well as noble forests of timber; and there are seasons when cattle might maintain themselves during the whole of the winter, the snow being then of no great depth; yet there are but few heads of these necessary animals. The scenery to the southward along the banks of the river, is also of the most picturesque and sublime appearance. The magnificent peak soaring to the clouds has a fine effect when viewed from the bed of the river.

361 Kozerofsky, forty miles beyond Oushkielova,
161 contains five dwellings and thirty-six people, and is pleasantly situated. I continued along the river Kamchatka for twelve miles, and then along that of the Tolbachinsk to an ostrog of the same name for thirty miles more. The latter part of the journey was through a crowded forest, and a thick fog, which occasioned me some serious blows, as the dogs made their rapid progress; now and then starting at the scent of a fox or sable. Tolbachinsk is a pretty little village with thirty inhabitants, and appears to be on the improvement; the establishment is a new one and almost secluded from the world. Stchappinat was the next village I came to. It is upon the Kamtchatka, at a deep and narrow part of the river which was not yet frozen

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of scrofula is become hereditary. In this part of the peninsula the chase is scarce, and the inhabitants mostly subsist upon fish, a few mountain sheep, and wild rein-deer, being the only meat they taste from one end of the year to the other. The situation is fine and highly productive in fish, but at this moment there are not a sufficiency of people to transact the ordinary business; a circumstance which calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous country, which is more than compensated by the succeeding richness of a valley eighteen miles in length. I crossed several times the Bistra, a rapid stream, uniting with the Bolshaya Reka, and was again obliged to become pilot, chief, and dog-master; however, I managed very well, and arrived early. Malka is deserving of little notice, yet is said to be celebrated for its baths! The situation is magnificently grand; the hospital stands in the bosom of a lofty chain of elevated mountains at two miles from the village. I was welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2 (1821-22)1824 Kamchadal

162 ing degree is a question I shall not answer, farther than by reminding my readers that at the discovery of Kamtchatka, we are told in the Russian history, that no less than one hundred and sixteen villages
164 were on the banks of the river Kamtchatka. The
162 small-pox, and its rival distemper, with other diseases, and above all the spirit of persecution which has been unremittingly practised towards these poor people, have been the several causes of the depopulation. Of late, however, I can with certainty say the population has not decreased; this may be owing to the benefits arising from vaccination, as well as somewhat better medical attend-
162 ants. But although population has of late kept its
563 maximum, it may be a question whether the aborigines have not decreased in the same ratio that the Russians and convicts have increased. At present there are several Yakut as well as Russian exiles, in the peninsula, neither of whom can be of much benefit; but both assisting to persecute and plunder the Kamtchatdales.

175 Of the history and origin of the Kamtchatdales little positive has ever been known; and that only for the last one hundred and thirty years. Kamtchatka is supposed to have been visited by some Russians in 1649, when one of the traveller Deshneff's vessels, was wrecked on its coast. Those Russians lived with them in peace for a considerable period of time; but quarrelling among themselves were murdered. Nothing more is known of the place

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 R 177 .23 ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65 The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 758 R 177 .75 The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2 (1821-22)1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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The women of this country have ſeldom more than ten children, the common eſtimate is four or five, they bear none after the age of forty. They aſſiſt one another in their deliveries, which are effected with great facility: meanwhile there are midwives in Kamtſchatka, but their number is very ſmall. The accidents which prove fatal to ſo many mothers, are much leſs frequent to theſe women, than inſtances of child-birth in the open air, in roads, or wherever their occupations call them. On

mountebanks. Similar in their impoſtures, their reign and their fall are ſimilar. Various reflections might be made on this ſubject. That a people equally ſimple and uninformed, like the Kamtſchadales, ſhould for a time have been the dupes of the impoſtures of their magicians, is not aſtoniſhing, and will admit of an excuſe: but that ſuch extreme ignorance and credulity ſhould be made ſenſible of their error, and bluſh at it, is a matter of ſurpriſe and congratulation; for even with the moſt enlightened nations of Europe, do not ſome kinds of chamans ſpring up every day, equally perfidious and deſtructive! They have all in the mean time their apoſtles, their proſelytes, and a prodigious number of martyrs.

7:Lesseps T-3 (1787-88)1790 Kamchadal

TOWARDS THE END OF NOVEMBER THE COLD
132 became on a ſudden ſo ſevere, that in a few
166 days the rivers were all frozen, even the Bol-
226 chaïa-reka, which ſeldom happens, becauſe of the extreme rapidity of its current. The next day it got rid of the ice that covered it, and from that time I ſaw no more ſtop before Bolcheretſk, lower than the houſe of the governor. Though frozen in various places, it preſents a great number chaſms, where the water is ſeen to flow as uſual.

On each ſhore of the peninſula, there is a ſenſible difference in the atmoſphere. During the fine weather, a drought prevailed at Saint Peter and Saint Paul's, whereas at Bolcheretſk they complained of frequent ſhowers; meanwhile autumn had not proved this year more rainy than common. Very heavy rains are injurious in this country, becauſe they occaſion floods, which drive the fiſh from the rivers; a famine moſt diſtreſſing to the poor Kamt-

7:Lesseps T-3 (1787-88)1790 Kamchadal

132 ſchadales is the reſult, as it happened laſt
166 year in all the villages along the weſtern
226 coaſt of the peninſula. This dreadful calamity occurs ſo frequently in this quarter, that the inhabitants are obliged to abandon their dwellings, and repair with their families to the borders of the Kamtſchatka, where they hope to find better reſources,
000 fiſh being more plentiful in this river. M. Kaſloff had intended to proceed along the weſtern coaſt, having already made his viſit through the eaſt; but the news of this famine determined him, contrary to his wiſhes, to return, rather than be driven to the neceſſity of ſtopping half way, or periſhing with hunger from the difficulty of procuring dogs and proviſion.

132 The wind varied conſiderably during my reſidence at Bolcheretſk; it was moſt commonly weſt, north-weſt, or north-eaſt; it blew ſometimes from the ſouth, but ſeldom

from

7:Lesseps T-3 (1787-88)1790 Kamchadal

166/361 At ten o'clock in the morning we had left ſight of Khaluli, and paſſed an old village of the ſame name, which had been lately deſerted on account of its bad ſituation. Farther on we found ſome more deſolated habitations, formerly the oſtrog of Ivaſchkin, and which had been removed, for a ſimilar reaſon, thirty werſts from its former ſituation. We came again to the ſea, and travelled for ſome time on the eaſtern coaſt. It forms another bay at this place, which I was deſirous of examining, but was, as before, prevented by the fog. I obſerved that the fog cleared up in proportion as the wind veered to the north-eaſt, which had hitherto been weſt and north-weſt.

361 Ivaſchkin is forty werſts from Khaluli, and very near to the ſea. It contains two yourts and ſix balagans, and is ſituated upon a ſmall river of the ſame name, which was entirely frozen, as was alſo one that we had juſt paſſed.

S: Jochelson A-5 (1910-11) 1928 Kamchadal

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

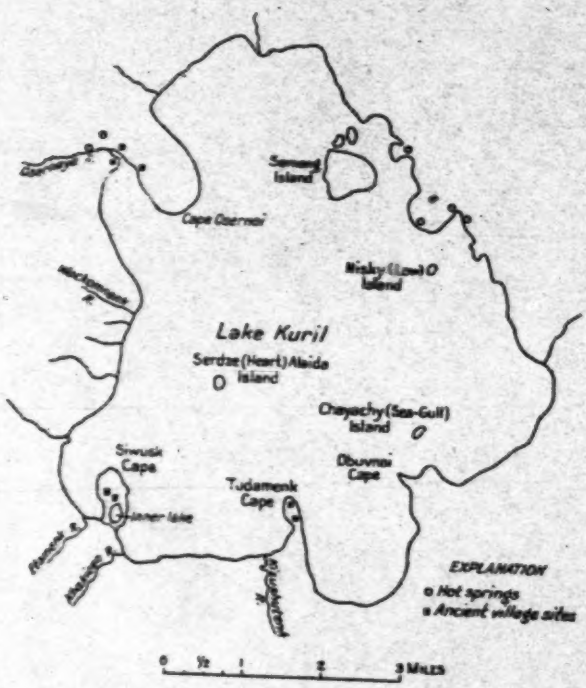
In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

● 167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
563 eight winter months, but the summer was very busy. Scores of laborers were
228 brought on the company's steamers from the Amur River. Not all the necessary
464 structures were ready at that time, and the imported laborers slept under the cover of primitive shades. Mountains of salt lay in the open, melting from rains. A part of the laborers were busy preparing a kind of caviar from the roe of



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228 salmon. After taking out the roe they threw overboard the split fish, causing an enormous waste of food-material. The laborers in the saltery and cannery threw out from their seines all other fish than salmon, and from the latter the hump-back salmon, which was not in favor with the foreman of the plant.

182 From information gathered before my trip to the lake I knew that there were several pits of ancient dwellings (see the map of the Kuril Lake). The natives
000 have either died out or were exterminated by the Russian conquerors. My party

22: Guillemard T-2 (1882) 1886 Kamchadal

563 The head-man of the village received us on landing—a person
622 of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167 Melcova owes its origin to an experiment. With the view of
563 encouraging the cultivation of the land and of making something
241 more of the country than a mere hunting district, where the in-
361 habitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian
R peasants were settled here in 1743, who were to devote themselves
177 entirely to agriculture. The result has been to a certain extent
. 24 successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

22: Guillemard T-2 (1882) 1886 Kamchadal

000 the roubles would no doubt start for Petropaulovsky, and turn them into vodky without loss of time.

144 We could make out nothing about the nationality of the people of this village. We had been told that some Aleuts from the Bering group had settled in this neighbourhood, but it seems that the Kurile islanders have also passed northward, and established themselves on the coast near Cape Lopatka. To us it appeared that they did not differ appreciably from the Kamschatdale type, but the opinion of a mere passer-by on these matters is usually valueless. Nothing certain is at present known of the origin of the Kamschatdales and Koriaks—the aboriginal tribes of the peninsula. Both appear to have become greatly reduced in numbers since the Russian conquest. As a pure race the Kamschatdales are now rare, except on the western side of the country. The Koriaks rarely or never come south of the Tigil River. They are a nomad race like the Lapps, owning reindeer and living in movable tents, and, like them, coming down to the lower ground in winter. Both these tribes belong to the "Hyperborean" unclassified group, and Mr. Keane[1] considers the Koriak as probably the parent stock of the sub-arctic races of this part of the globe. Their language as shown by the vocabulary of M. de Lesseps, although bearing but a faint resemblance to the Kamschatdale, is closely allied to that of the Tchuktchi tribe in the region of the Anadyr, and it is possible that, ethnically as well as geographically, they form a connecting link between these two latter peoples.[2]

563 I am not aware that the presence of Lamuts in Kamschatka has ever been recorded by previous writers, but while on our journey through the country we were told by Afanasi Waren

144 [1] "Asia." Stanford's Compendium of Geography and Travel.

167 [2] The accidental immigration of Japanese must be regarded as a not unimportant factor in the composition of the Kamschatdale race. Short as is the period that has elapsed since the Russian conquest, it has furnished several instances, recorded by Krasheninikov, of Japanese junks having been driven from their course and wrecked on the shores of the peninsula. This chance peopling of the country has, no doubt, been going on for centuries, and it is probable that but few of the immigrants ever regained their native land.

1: Kolarz J-4 (no date) 1954 RR1 Siberia

Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

K 175 131 167 A 175

/127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

A K 174 103 192

2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101]

Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

K 823 A 439 823 186 A 439 435

/572 cont./

their eyes, of course, were surrounded with the aura of great wealth and esteem, made those knives, swords, and the like which they themselves (the Ainu) prized so highly and paid for so dearly in trade with them. How very much this was the case can be seen from Steller's information that the Kurile Ainu gladly gave 20 sea beavers for an old Japanese saber and thought that they had made a very good trade, but wore such sabers only on festive days or during festive processions and made "the strangest figures during the welcoming" with them.

G A K 439 17 325

For the moment it must remain undecided whether the above-mentioned iron needles, which came from Japan to the Kamchadal as their first iron implements, spread from the latter to their neighbors, the Koryak and the Chukchee, before iron was brought these peoples by the Russians. At any rate, three Paleo-Asiatic peoples, the Ainu, the Gilyak, and the Kamchadal, received iron from Japan, and this was a natural consequence of the geographical position of the latter in the vicinity of these peoples, for just to the north of Nippon, the principal island of Japan, is the island of Jesso, the principal region of the Ainu (1),

A [131] [114] [113]

1. The view advanced chiefly by Ph. Siebold that the Ainu formerly also inhabited the north of Nippon (see above, p. 255) has recently been attacked by Brauns ("Die Bewohner des Japanischen Inselreichs /The Inhabitants of the Japanese Island-Realm/" in the Jahresber. des Frankfurter Vereins für Geogr. u. Statist., Years 48 and 49, 1883-1884, 1884-1885, Scientific Part, pp. 5 ff).

which, in turn, on the one hand, leads to the half-Gilyak Sakhalin, and, on the other hand, via the chain of the Kuriles, to Kamchatka. One may therefore draw the further conclusion that at the time when these peoples lived farther in the interior

G A K 174 325

137 violent north winds, which blow here frequently; and we find that places lying farther north are more fruitful, as about the *Tchukotſkoi* Noſs, where they are covered from theſe winds.

000 It is likewiſe obſerved, that the fiſh enter the rivers in *America* earlier than in *Kamtſchatka*. Great plenty of fiſh have been ſeen there on the 20th of *July*, at which time in *Kamtſchatka* they only begin to appear. There are a ſort of raſberries of a very extraordinary ſize and fine taſte; beſides honeyſuckles, cranberries, blackberries, and bilberries in great plenty.: as alſo ſeals, ſea-beavers, whales, dog-fiſh, marmotta-minor, red and black foxes which are not ſo wild as in other places, perhaps becauſe they are ſeldom hunted.

Among the known birds have been obſerved magpies, crows, ſea-gulls, water-cranes, ſwans, ducks, quails, plovers, *Greenland* pigeons, and fowls called northern ducks; and among the unknown, ten kinds diſtinguiſhable from any ſpecies of *European* fowl.

171 The natives there,[1] who are as wild as the *Koreki* and the *Tchukotskoi*, are plump, broad ſhouldered, ſtrong boned, of a middle ſize, with ſtreight and black hair which hangs looſe. Their faces are ſwarthy and flat, their noſes ſomewhat pointed but very broad, with black eyes, thick lips, ſmall beards, and ſhort necks. Their ſhirts, which come lower than the knee, are girded about their bellies with leather ſtrings; and their breeches and trowſers are made of the ſkins of ſeals dyed with alder, and are like thoſe of the *Kamtſchatdales*. To their girdles they hang iron knives in caſes, like thoſe worn by the *Ruſſian* boors. Their hats are made of graſs, as thoſe of the *Kamtſchatdales*, without tops, in the ſhapes of umbrellos, dyed with green and red colours, with falcons' feathers before, or with graſs that is combed out, which looks like the plumage that the *Americans* uſe about *Brazil*. They feed on fiſh, ſea animals, and the ſweet herb, which they prepare

1. [in America across from Kamchatka]

prepare as the *Kamtſchatdales* do; beſides they uſe the dry bark /7/ of the poplar and pine trees, which is eaten as food, not only here and in *Kamtſchatka*, but in all *Siberia*, and ſome parts of *Puſſia*, even as far as the province of *Viatka*, eſpecially in times of ſcarcity; they uſe likewiſe ſea-graſs laid up in heaps, which looks like, and is as tough as, leather thongs. Wine and tobacco they know not, which ſerves as a real proof of their having had hitherto no communication with the *Europeans*. They eſteem it a particular ornament to make holes on their faces in different parts, in which they place various ſtones and bones; others wear in their noſtrils feathers about two inches long; ſome wear bones of the ſame ſort in their under lips, and others upon the forehead. The people who live on the iſlands near the *Tchukotſkoi* Noſs, and who have a communication with the *Tſchuktſchi*, are certainly of the ſame race, for among them it is always eſteemed as an ornament to wear bones. The late major *Paulutſkoy* having had once a ſkirmiſh with the *Tſchuktſchi*, found among the dead two men of this country, under whoſe noſes were placed two teeth of the ſea-horſe, in holes made for that purpoſe; for which reaſon the natives call thoſe iſlanders *Zoobatee*, or large teethed; and, as the priſoners reported, they did not come there to aſſiſt them, but to ſee their manner of fighting with the *Ruſſians*.

It may be concluded from this, that the *Tſchuktſchi* and they have the ſame language, or, at leaſt, that there is ſuch a near reſemblance between their languages, as to enable them to converſe together without an interpreter. The language of the *Tſchuktſchi* is derived from that of the *Koreki*, and differ from it in dialect only; the *Koreki* therefore can converſe with them without difficulty. And Mr. *Steller*'s ſaying, that not one of our interpreters could underſtand the *American* language, might ariſe from the great difference in the dialect, or from the particular pronunciation, which is obſerved, not only between the wild

/7/ wild natives of *Kamtſchatka*, but alſo between the *Europeans* in different provinces. There is ſcarce one fort in *Kamtſchatka* which does not differ in language from that of another; and thoſe forts of ſome hundred verſts' diſtance hardly underſtand one another. The *Americans* and the *Kamtſchadales* agree in the following things: Firſt, their features are alike. Secondly, the *Americans* prepare the ſweet herb in the ſame manner as the *Kamtſchadales* do, which has never been obſerved any where elſe. Thirdly, they both uſe wood in ſtriking fire. Fourthly, it has been obſerved, from many inſtances, that their hatchets are made of ſtone or bone; and Mr. *Steller* thinks, not without reaſon, that the *Americans* had formerly a communication with the people of *Kamtſchatka*. Fifthly, their wearing apparel and hats are the ſame. And, ſixthly, they dye the ſkins of beaſts with alder, as the *Kamtſchatdales* do: from whence it appears probable, that they are of the ſame race. Theſe particulars may help to anſwer the queſtion, Whence was *America* peopled? for though we ſhould grant, that *America* and *Aſia* were never joined, yet theſe two parts of the globe lie ſo near each other, that the impoſſibility of the inhabitants of *Aſia* going over to *America*, (eſpecially as the number of iſlands lying between them made the paſſage more eaſy) cannot be maintained.

Their arms are the bow and arrow; but what ſort of bows we cannot tell, for our people ſaw none of them. Their arrows indeed are longer than thoſe of the *Kamtſchadales*, but reſemble intirely thoſe uſed by the *Tunguſki* and *Tartars*, which our people found were dyed of a black colour, and ſcraped ſmooth. The *Americans* uſe boats made of ſkins, as the *Koreki* and the *Tſchuktſchi* do. Their boats are 12 feet long and two broad, the head and ſtern ſharp, and the bottom flat. The inſide is made of poles joined at both ends, which are kept extended by a proper piece of wood; and the ſkins ſewed round ſeem to be thoſe of ſeals dyed of a cherry colour: the ſeat is round, two

lk: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

two yards from the ſtern, and ſewed about with guts, which, 171
with the help of leather thongs laced round the edges, can be drawn together and opened like a purſe. The *American* ſitting in this place ſtretches out his legs, and draws the ſkin tight about his body. Theſe boats will live in the moſt ſtormy ſea, though they are ſo light that they may be carried with one hand.

When the *Americans* ſee any ſtrangers they row towards them, making a long ſpeech; but whether this be ſome conjuration, or a ceremony at receiving them, we cannot certainly ſay; for both the one and the other is in uſe among the *Kuriles*: but, before they approach them, they paint their cheeks with a black pencil, and ſtop their noſtrils with graſs. They ſeem to receive ſtrangers very kindly, converſe in a friendly manner, with their eyes fixed upon them, treat them with great civility, and make them preſents of whales' fat, and of thoſe pencils with which they daub their own cheeks, not doubting but ſuch things are as acceptable to others as to themſelves.

It is very ſafe ſailing in thoſe parts in the ſpring and ſummer; ooo
but in the autumn ſo dangerous, that there is not a day on which they dare venture out for fear of periſhing; the winds and ſtorms being ſo violent, that the *Ruſſians*, who have uſed the ſea for forty years, declare they have never ſeen any thing equal to them. The following are looked upon here as ſigns of the land being near: When many different ſorts of ſea-cabbage appear floating on the ſea; when they obſerve that ſort of graſs of which cloaks, carpets, and little bags are made at *Kamtſchatka*, for it grows only upon the ſea ſhore; and when ſea-gulls and ſea animals, ſuch as ſeals and the like, appear in great numbers; for though, the ſeals have an opening in their hearts, called the *Foramen ovale*, and a paſſage called *Ductus arterioſus botalli*, which are both open, and therefore can keep under water for a long time, and

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 The whales here are from ſeven to fifteen fathoms long. We can give no account of the different ſpecies of whales at *Kamtſchatka*, few of them being caught here except in the northern parts by the *Koreki* and *Tchukotſkoi*, who feed upon their fleſh. In the year 1740 a whale was brought by the flood into the mouth of the *Bolſkoi* river; but ſome Coſſacks obſerving it, went out in boats, and cut it all to pieces; ſo that next day when I came, to my great diſappointment, I neither found fleſh nor bones; for theſe people, who had cut off the fleſh, being afraid of puniſhment for doing it without permiſſion, had buried the bones to conceal their crime. *Steller* obſerved that more whales were thrown on the eaſtern than on the weſtern ſhore, and more in the harveſt than in the ſpring.

285 171 The different people have different ways of catching them: the *Kuriles* by throwing their poiſoned darts into them: the *Olutores* catch them in nets, made of thongs of the ſea horſe ſkin as broad as a man's hand, which they dry in the ſmoke. Theſe they ſet in the mouths of the rivers, and the whale purſuing other fiſh entangles himſelf in them. With theſe thongs he is dragged to the ſhore by the h[illegible] of numbers who aſſemble on theſe occaſions, and always p[illegible]rform certain ceremonies. They bring out of their common huts a wooden whale about two feet long; then building a new hut they place this image in it, uſing ſeveral conjurations. After this they light a lamp, and appointing ſome people to look after it, give orders that it be not allowed to go out from ſpring to harveſt, which is as long as the fiſhing ſeaſon laſts. They then cut the whale into different portions, which, looking upon it as their moſt delicate proviſion, they prepare in the following manner:---They dry the lean in the ſun; and the ſkin, which they ſeparate from the fat, they beat with hammers, and of it make ſoles to their ſhoes, which wears extremely well. They ſmoke the fat parts, and

and cleaning the guts, they fill them with the oil which runs in cutting the fish, or which they melt from the blubber, having no other vessels to keep it in. 171 225

The *Tchukotskoi* kill whales with a harpoon in the same manner as the *Europeans* do, and they catch so many that they never eat those whales that are thrown dead on shore, as some of the neighbouring people do, but only extract their fat for burning. Although the *Tchukotskoi* have large herds of deer, which might be sufficient for their sustenance, yet they are the greatest whale fishers of any people in this part of the globe, and look upon the fat of the whales as the greatest delicacy; besides, having great scarcity of wood, they use it for burning. They make themselves shirts of the intestines of the whales, like the *Americans*; and use them for vessels, like the *Olutores*.

The kasatki, (falsely called the sword-fish) which are numerous in these seas, are very useful to the inhabitants, for these fish frequently either kill or drive the whales on shore. *Steller* had an opportunity of seeing an engagement between the kasatki and whale, both at sea and upon *Bering*'s island. When the kasatki attacks the whale he makes him roar so that he may be heard some miles. If the whale makes off, the kasatki follows him at some distance 'till great numbers of them gather together, and make a general attack. It is never observed that such whales as are thrown on shore have any part eaten out of their bodies; so that this war between the whales and the kasatki must proceed only from a natural enmity. The fishers are so much afraid of these animals that they not only never throw any darts at them, but if possible avoid going near them; nay, they even make offerings to them, begging that they will not hurt them: for if irritated they sometimes overturn their boats. 136 825

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
122 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

the ſettled *Koreki* and *Tchukotſkoi*, for want of proper timber and plank, make their baidars of the ſkins of ſea animals. 171/501

Theſe boats hold two perſons, one of which ſits in the prow and the other in the ſtern. They puſh them againſt the ſtream with poles, which is attended with great trouble: when the current is ſtrong they can ſcarcely advance two feet in ten minutes; notwithſtanding which, they will carry theſe boats full loaded ſometimes 20 verſts, and, when the ſtream is not very ſtrong, even 30 or 40 verſts.

In the larger boats they can carry 30 or 40 pood; and when the goods are not very heavy, they lay them upon a float or bridge made between two boats joined together. They uſe this method in tranſporting their proviſions down with the ſtream, and alſo to and from the iſlands.

CHAP. VI.

Of the LABOUR *appropriated to the* DIFFERENT SEXES. 221/462

IN the ſummer time the men are employed in catching, drying, and tranſporting fiſh to their habitations; in preparing bones and ſour fiſh to feed their dogs: the women, in cleaning the fiſh, and ſpreading it out to dry; and ſometimes they go a fiſhing with their huſbands. After their fiſhing is over, they gather in the herbs, roots, and berries, both for food and medicine.

In the harveſt the men catch the fiſh that appear at that time, and kill fowl, ſuch as geeſe, ducks, ſwans, and the like; they teach their dogs to draw carriages, and prepare wood for their

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-ſkin;
what comes round the legs is of dreſſed leather or dyed ſeal-
ſkins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

262 dried caviar, makes him an agreeable meal; but they cannot eat either ſeparately, for the caviar ſticks like glue to the teeth, and the bark, although it ſhould be chewed ever ſo long by itſelf, they are hardly ever able to ſwallow down alone. There is ſtill 252 a fourth method which both the *Kamtſchadales* and *Koreki* uſe 171 in preparing their caviar; having covered the bottom of a pit with graſs, they throw the freſh caviar into it, and leave it there to grow ſour: the *Koreki* tie their's in bags and leave it to ſour; this is eſteemed their moſt delicate diſh.

252 There is a third ſort of diet, called by the *Kamtſchadales* 262 *tchupriki*, which is prepared in this manner: in their huts over the fire-place they make a bridge of ſtakes, upon which they lay a heap of fiſh, which remains there 'till the hut becomes as warm as a bagnio; if there was no great thickneſs of fiſh one fire would ſerve to dreſs it; but ſometimes they are obliged to make two, three, or more fires. Fiſh dreſſed in this manner is half roaſted, half ſmoaked, and has a very agreeable taſte, and may be reckoned the beſt of all the *Kamtſchatka* cookery; for the whole juice and fat is prepared with a gradual heat, and kept in by the skin, in which it lies as in a bag, and when ready may be eaſily ſeparated from the fiſh; as ſoon as it is thus dreſſed, they take out the guts, and ſpread the body upon a mat to dry; this they afterwards break ſmall and put into bags, carrying it along with them for proviſion; and when dried eat it like the *yokola*.

252 The *Kamtſchadales* have a diſh, which they eſteem very 262 much, called *huigul*: it is fiſh laid to grow ſour in pits; and 171 though the ſmell of it is intollerable, yet the *Kamtſchadales* eſteem it a perfume. This fiſh ſometimes rots ſo much in the pits that they cannot take it out without ladles; however in that caſe they uſe it for feeding their dogs.

Mr. *Steller* ſays, that the ſummer *Samojeds* likewiſe ſour their fiſh; but that the earth being frozen preſerves it much better;

better; the *Jakutſki* alſo dig deep pits, in which they lay their 252
fiſh, ſprinkling it with wood aſhes, and cover it with leaves at 262
top, and over all put a layer of earth: this method is better 171
than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their 252
troughs, with ſeveral different herbs and roots; the broth they 264
drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, 262
called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink 273
but water: but when they made merry they drank water 177
which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves fre- 271
quently by throwing handfuls of ſnow into their mouths; and 583
the bridegrooms who work with the fathers of their future brides 524
find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

CHAPTER VI

ARCHÆOLOGICAL REMAINS FROM THE KAMCHATKA EXCAVATIONS

SOURCE MATERIAL FOR STONE IMPLEMENTS

324 The following is a list of minerals of which the Kamchadal manufactured their stone implements and weapons. The minerals are given in the order of their diminishing hardness:

1 Flint
2 Hornstone schist
3 Quartz schist
4 Quartzite
5 Jasper (variety of quartz)
6 Chalcedony (agate)
7 Andesite
8 Obsidian, andesitic
9 Augite, andesitic
10 Porphyrite
11 Sandstone
12 Quartz slate
13 Marble
14 Slate
15 Red ocher
16 Volcanic tuff
17 White clay

171 While on the Aleutian Islands[1] no flint implements were found, a considerable
324 number of arrow heads and other implements excavated by the author in Kamchatka were made of flint, according to the determination of a mineralogist, Professor A. G. Titov of the University of Moscow. The Aleut used andesite, instead of flint, most frequently for stone implements; the Kamchadal very seldom used this material, preferring the massive varieties of quartz and, partly, obsidian.

Soapstone, of which the Eskimo manufacture their lamps, is not met in Kamchatka and the Kamchadal use harder minerals for lamps, as will be seen later.

LOCALITIES WHERE EXCAVATIONS WERE MADE

172 The present writer made excavations in the following places:

(1) On the shore of Salt Lake on the isthmus in the Avacha Bay, August 19, 1910.
(2) In the Bogatyrevskaya Bay, above Salt Lake, in the forest, August 20, 1910.
(3) Cup-like holes were excavated not far from Salt Lake in afternoon of the same day.
(4) On the slope of the hill on the northeastern side of the Bogatyrevskaya Bay, August 21, 1910.
(5) In the village Syeroglaska, 10 miles from Petropavlovsk, August 25, 1910.
(6) In the village Savoiko, August 29–30, 1910. Savoiko is located on the left bank of the Avacha River, 16 miles from its mouth. Formerly it was called Stary Ostrog and renamed Savoiko after the Governor of Kamchatka (1850–1855), the senior captain and later admiral, V. S. Savoiko.

For numbers 1 to 6, see map of the Avacha Bay (p. 42).

(7) On the bank of the Nalacheva River, September 19.
(8) On the shores of the Nalacheva Lake, September 20 to 24, 1910.
(9) On the Nalacheva Cape, September 26–30, 1910.
(10) Ancient site on the mouth of Kulki River, emptying itself into the Tighil River, 4.6 miles from its mouth, June 10, 1911.
(11) Ancient site on the mouth of Kavran River, June 27 to July 6, 1911.
(12) On the bank of Csernaya River, 2 miles from Kuril Lake, August 6, 1911.
(13) On the Siwuak Cape in Lake Kuril from August 9 to August 14, 1911.

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 58.

[pp. 38-40 have not been included in the file -- Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchadal

342 According to Krasheninnikoff the ancient Kamchadal had still another kind of summer dwelling, the superterrene grass lodge called bashabash. Unfortunately he does not state its shape—whether it was of a conical or hemispherical type. The bashabash was put up at the fishing places near the dwellings on piles and served chiefly as a place for cooking, which could not be done on the wooden platforms of the pile-dwellings.

261 757 171 White clay, pieces of which were found in some of the excavations, was eaten by the Kamchadal, according to Krasheninnikoff (II, p. 180), as a remedy for diarrhœa. Bogoras relates (*The Chukchee*, p. 200) that the reindeer Chukchee, the Koryak and Lamut in Kamchatka, occasionally use as food a kind of white clay called by them nute-ecen (earth-fat). The Kamchadal called the white clay "earth sour cream." Sternberg tells (*The Gilyak*, p. 17) of a Gilyak favorite dish for treating guests, called moss, which consists of a mixture of the gluey broth of fish skins, seal's fat, berries, rice, and sometimes of minced dried fish, to which the solution of white clay is added.

It must be noted that the use of some kinds of clay as food is not limited to Siberia alone. The eating of edible clay has been observed among certain Guiana Indians,[1] Carib and Antillean islanders,[2] and among the people of Georgia and the Carolinas.[3] Deniker refers to many other places where the habit of eating certain earthy substances—kaolin, clay, limestone—has been observed. He calls this habit *Geophagy* and explains it by the need of supplying the needed mineral substances (calcareous or alkaline salts).[4]

[1] W. E. Roth, *An Introductory Study of the Arts, Craft and Customs of the Guiana Indians*, Annual Report of the Bureau of American Ethnology, 1924).

[2] William Sheldon, *Brief Account of the Caribs who Inhabited the Antilles*, Transactions of the American Antiquarian Society, I, 1820, pp. 365–435).

[3] Charlotte D. Gower, *The Northern and Southern Affiliations of Antillean Culture*, Memoirs of the American Anthropological Association, Number 35, 1927, p. 26.

[4] J. Deniker, *The Races of Man*, London, 1900, p. 143.

CHAPTER VII

STONE LAMPS

171 I discovered 36 stone lamps in excavations in Kamchatka. Some of them were broken. All the types of ancient Kamchadal stone lamps are shown in
354 Plates 14 and 15 and text-figures 64 to 66. They are not remarkable for great diversity as to size and form. I mentioned Aleut lamps[1] longer than 310 mm.,
172 and one lamp 1 meter long. There is in the U. S. National Museum at Washington an unusually large stone lamp (No. 90476) from Kodiak Island which weighs 67½ pounds.[2] An Eskimo stone lamp 43 inches long (i. e., somewhat

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64. Stone lamp of sandstone.
65. Stone lamp of porphyrite.
66. Stone lamp of andesitic lava, in process of manufacture.
All of Kuril Lake.

longer than a meter), weighing about 50 pounds is in the American Museum of Natural History of New York. Dr. Stefanson saw several larger lamps, but was unable to purchase them from their owners.[3]

354 The Kamchadal stone lamps show the following shapes: circular, elliptical,
172 egg-like and sad-iron in outline. No lamps of rectangular form, like those of the Aleut, and clam-shell shaped or crescentic in outline, like those of the Eskimo of Cumberland Gulf or Point Barrow, were excavated in Kamchatka.

354 Lamp No. 3158 shows the cavity rudely picked out with a hammerstone in the process of manufacture. All the other illustrations of lamps show them in a
324 finished shape and polished. The straight rims of some lamps were chiseled out with hard quartz chisels (see No. 2183). Most of the lamps are flat-bottomed, so
172 they stand without support. The lamp was put on a wooden stand in a somewhat

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 74.
[2] Walter Hough, *The Lamp of the Eskimo*, Annual Report, U. S. National Museum for the year 1897, Washington, 1898, pp. 1027–1057.
[3] See Vilhjamur Stefansson, *My Life with the Eskimo*, New York, 1913, p. 249.

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Tyrchov's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. XXXVII, No. 2, St. Petersburg, 1906, in Russian, figures 29 (p. 342) and 29 (p. 342).

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Some Kamchadal and Kurilian objects and their decorations are shown for the purpose of comparison. Plate 16 shows objects found by the author while digging on the shores of the Kuril Lake (see description of this plate).

According to Torii (*Les Ainou des Iles Kouriles*, p. 277) the wooden combs of the present Aino-women resemble very much the bone comb shown in figure 69. Chamberlain says (*Things Japanese*, p. 33) that ornamentations on pottery were made by the Ainos with a wooden comb, stamp or pointed stick. This is just the same as I concluded concerning the combs and other instruments illustrated on Plate 16.

To return to the proper subject of this chapter, the pottery. According to the investigations of Torii, the Kurilian women of the island Shikotan manufactured pots, jars, saucepans and plates from clay tempered with sand and chopped grass as late as the last century. About three generations ago they abandoned pottery making, using Japanese and Russian iron vessels of every kind.

Torii investigated numerous neolithic sites on the Shumushur and Paramushir Islands, and everywhere he found remains of pottery of the same primitive kind, which was in use the last time among the northern Kurilians. On the contrary, the Kurilians of the second wave left on the southern islands, Kunashiri and Iturup, remains of pottery of greater perfection. In the same period the Ainos of the second wave who remained in Yezo abandoned the manufacture of pottery, getting all kinds of wooden and iron vessels from Japan.

That part of the Ainos who were forced out from Yezo by the second wave of Japanese Ainos and went to the island Sakhalin, instead of the Kurilian Islands, continued to manufacture their primitive pottery. The second wave of Ainos who came to Sakhalin from Yezo brought with them metal vessels. The first wave being assimilated with them ceased to manufacture pottery, except vessels necessary for religious ceremonies. We know that practices connected with the cult persist everywhere long after they have been eliminated in ordinary life. The remains of this ceremonial pottery are identical with the remains of pottery of the Kurilian manufacture.

According to Mamiya Rindzo, the Sakhalin Ainos on the shore obtained iron kettles and pans from Japan and those from the interior got theirs from Tungus.[1]

POTTERY OF THE AINOS

The Ainos of Yezo and the Kurilians, according to Munro, were not supposed to be conversant with pottery until R. Torii in 1899 found that the Kurilian Ainos not only had used, but recently had made pottery of a coarse description.[2]

Dittmar found "small clay vessels" of most primitive workmanship. "The clay crumbled under the hands, it had evidently been badly (if at all) baked," says Dittmar. As the pots were saturated with blubber, he thinks it possible

[1] R. Torii, *Études Archéologiques et Ethnologiques: Les Ainou des Iles Kouriles.*, Journal College of Science, Imperial University of Tokyo, 1919–1921, pp. 188–191.
[2] N. G. Munro, *Prehistoric Japan*, Yokohama, 1911, p. 195.

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We have referred to Mr. Torii who found that the Kurilian Ainos used this kind of pottery. Mr. Mamiya Rinzo displayed a clay pan with handles inside from Yezo.[1] Mr. S. Susuki has also shown a clay pan of rough make with the handles inside from Sakhalin Island.

The question arises as to where we may look for the place of origin of this kind of pottery: in Kamchatka or Japan. Pottery in general needs a sedentary life for its proper development. The same may be said of the primitive pottery

Fragments of ancient Kurilian pottery.

in question. It could develop among the original settlers of Japan, the Ainos, and spread to the north, to Sakhalin, Kurilian Islands and Kamchatka. The sedentary or semi-sedentary fishers of Kamchatka might have adopted it from the Kurilians.

According to Mr. N. Tanaka, "within the last 20 years earthenware pans with handles inside were in use in Musashi and the island of Hachijo."[2]

Illustrations of the following fragments of ancient Kurilian pottery are taken from R. Torii's work (*Les Ainou des Iles Kouriles*, Plate XXXIII). Figures 75 and 76 show fragments of Kurilian pottery with inside ears. Figure 77 shows a

[1] The Japanese investigator Mamiya Rinzo spent the years 1804-1817 in Sakhalin.
[2] See Mûrro, *Prehistoric Japan*, Yokohama, 1911, p. 198. Cited from Tokyo Jinrigaku (Tokyo Anthropological Magazine), No. 18, 1887.

Sr Jochelson A-5 (1910-11) 1928 Kamchadal

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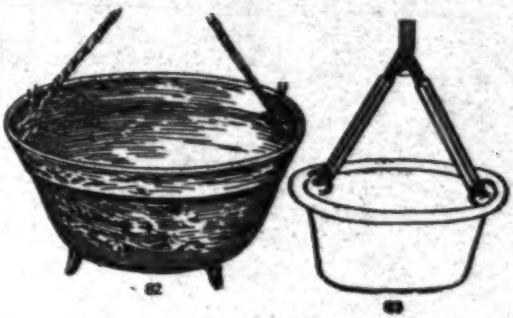
fragment of the lower part and the flat bottom of a clay vessel. Figure 78 represents a fragment of a clay vessel with a drilled hole for tying it by a cord to the hole of another broken piece of the vessel. In figure 79, Torii gives an outline of a clay pan with two ears inside. It is not clear whether there was a third ear, like that in the Kamchadal clay pots.

Figure 80 shows a fragment of ancient Aino pottery with an ear inside, found, according to Torii, in Sapporo on Yeso. It is shown one-third natural size. Figure 81 represents a clay vessel of ancient pottery with ears inside found in Esashi, Yeso; two-ninths natural size. This drawing is taken from an article by the late Professor S. Tsuboi in the Bulletin of the Tokyo Anthropological Society (vol. IV, No. 37, March 1889, p. 227). This vessel has only two inside ears. A rough sketch of a Sakhalin clay pot with ears inside is shown by Mr. Suzuki in his work, *Karafuto Nikki*.[1] Like figure 81 this vessel also has only two ears.



82 83

Iron cooking vessels.

According to Torii (*Les Ainou des Iles Kouriles*, p. 279) fragments of pottery with ears inside the pots were found also in Japan, i. e., on the Nippon Island. Thus we see that the manufacture of this kind of primitive pottery was not limited to the Kurilian Islands and Sakhalin only. It spread all over Japan—over localities formerly inhabited by Ainos. But from nowhere, except in Kamchatka, were clay vessels with three inside handles reported.

Figure 82 shows a sketch of an iron pan from Sakhalin with ears inside the vessel. The illustration was published by Torii (*Les Ainou des Iles Kouriles*, p. 195). Figure 83 shows a drawing of an iron pot with loops on the inside surface. It is from a photograph of a piece in the Museum of the Imperial University in Tokyo, kindly forwarded to me by Professor Akira Matsumura. The cord is covered with birch bark in order to protect it from the heat of the boiling pot. It must be noted that the iron pots (figs. 82–83) have only two inside ears like the

[1] Suzuki traveled in Karafuto (Sakhalin) Island in 1882. See *Karafuto Nikki*, Shigehiro Suzuki, With Notes and Addenda by Tokuhiro Matsumura, 2 vols., Tokyo, 1902.

171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found
415 in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments
172 of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 Fragments of a different kind of clay pots were found by the author in the
323 excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these
171 fragments seems to be from small vessels, the clay to be burnt, and the pots more
172 decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot has a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 22 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Torbel, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rim.

[4] See the author's work, *The Koryak*, p. 640, fig. 105.

171 common with that of the thick and clumsy clay lamps and unbaked quadrangular
415 kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in
323 the Koryak excavations were black from soot and fat, and were evidently well
baked, as they remained strong and hard, although they had been lying in the wet
172 soil. All these potsherds were made of coarse clay containing fine gravel and pieces of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen before (p. 20) that neolithic sites in the Bolbol Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the author in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Ainos is shown in figure 77.

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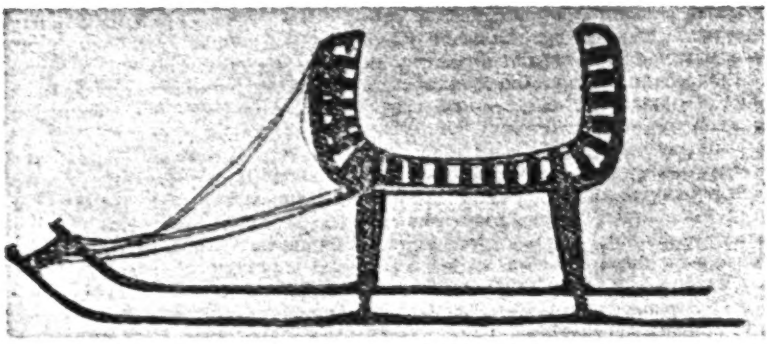

18th-century dogsled.

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[322] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic technology. "The former Kamchatka metals, almost until the coming of
[321] the Russians, were bone and stones. They were used in the making of axes,
[324] knives, spears, arrows, lancets and needles," Krasheninnikov writes about the Itel'mens. Rock crystal was also widely used for knives and tips.
[372] Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

291/854 they have a deer ſkin girt, which ſerves as a faſh. The women carry their children on their back by means of a ſtring, which paſſes round the forehead of the mother and under the buttocks of the child.

171/622 The toyon of Karagui, at whoſe houſe we lodged, was an old rebel. It was with ſome difficulty he had been brought back to his duty, and he gave us ſome uneaſineſs by his poſitive refuſal to procure us fiſh.

The manners of the inhabitants of this oſtrog are very ſimilar to thoſe of the neighbouring Koriacs. This analogy is as conſpicuous in their idiom as in the dreſs of their children. I had an opportunity of remarking it the day after our arrival.

Underſtanding that there were two hordes of rein deer Koriacs at no great diſtance, we ſent immediately a meſſenger to them to

requeſt

7:Lesseps T-3 (1787-88)1790 Kamchadal

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

17: Heizer--419 E-3 (no date) 1943 Kamchadal
116, 171, 225

" Whaling is of general occurrence on the east Asiatic littoral from East Cape at Bering Strait at least as far south as Japan. It is commonly considered a general feature of Eskimo culture, though some groups, by reason of continental cultural orientation or environmental restrictions, do not indulge in it....

On the Pacific littoral of northeast Asia there is a small, restricted area where whaling was accomplished by the relatively simple procedure of throwing a lance into the whale, the stone point of which was detachable and smeared with deadly aconite poison. The area is that of the Kurile Islands and the Kamchatkan coast. The Koryak to the north and Japanese to the south employed different methods."

175 until Vladimir Atlassof discovered the peninsula in his excursions from the Anadyr, from which time a constant petty warfare continued between the Russians and natives, until the general revolt and massacre in 1731. Since this period, the peninsula has not been greatly troubled with either
171 conspiracies or massacres. Little doubt can exist
177 that the Kamtchatdales are of Asiatic origin; of
181 this, their features and customs, as well as their dwarfish size, are evident tokens. I have read several dissertations upon the subject, but disagree with most of them. My own opinion is formed from ocular demonstration alone, and not from a study of the circumstances under which they labour. Their having progressed from America is indeed a ridiculous idea; and their having learnt many secrets, as causing fire by friction, &c. from the inhabitants of the opposite continent, is just as probable as the other sagacious notions, that they were the teachers. How, in either case, could they pass that formerly ferocious and warlike race, the Tchuktchi? Or if they had come from the north of Siberia, from Irkutsk or Yakutsk by Okotsk, and Idgige, how did they pass the still more fierce and barbarous Koriaks? The idea is absurd; and the only one I can for a moment entertain is, that they are a Mongole tribe, who were driven down the Amoor, and passing along the Kurile Isles, reached Kamtchatka. A few of the same race are still the inhabitants of those isles,

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

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/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

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1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachtschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

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In the whole series of Paleo-Asiatic peoples from Jesso to Greenland we find only two small tribes who lack the custom of tattooing -- the Italmen on Kamchatka and the Gilyak on the Amur and on Sakhalin. Under these circumstances one might think that the custom of tattooing was formerly indigenous among these two peoples, too, but had disappeared in the course of time. Such an assumption, however, is not permissible. Steller's and Krascheninnikof's reports on the Italmen come from a time when the latter had by no means lost their national characteristics to such an extent that such a prominent and, if it existed among them, ancient custom as tattooing could have already completely disappeared without any remnants or traces and even without having left behind any accounts in the traditions. And, as was pointed out at the very beginning of this work, I became fully acquainted with the Gilyak at a time when they were still in full possession of their individuality. The complete lack of tattooing among the former as well as among the latter must therefore be regarded as part of their individuality in contrast to the other Paleo-Asiatic peoples.

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At first glance it might seem that this individuality of the Gilyak in the Amur region was also shared by other peoples, in particular those living adjacent to the Gilyak, for the Olcha, the Orok on Sakhalin, the Negda, and Samagir do not have the custom of tattooing. But the situation is essentially different among them. I think I can say with certainty that tattooing is not at all customary at present among the Olcha, /422/ for I became acquainted with them on several voyages throughout their habitation area. I became acquainted with the Samagir on the Gorin only in Ngagha, the largest of their villages, to be sure, and concerning the Orok on Sakhalin and the Negda, I met only isolated individuals, but other travelers, too, who had more contact with them, did not observe any kind of tattooing among them, for example, neither Middendorff and Schmidt among the Negda nor Poljakof, after a stay of several weeks on the east coast of Sakhalin, among the Orok there. This is very noteworthy

Ainu ABC
Kamchadal RY3
Northeast Siberia RY1

A 492 493 698 /487 cont./ oppression of Japanese domination weighing down upon them and paralyzing the general life of the people.

It is known from the detailed descriptions by Steller (2) and

K 492 493 [113]

2. Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, pp. 132 ff, 370 ff.

Krascheninnikof that the Italmen on Kamchatka since time immemorial have used dogs for traveling, for which they selected and trained the largest and strongest of them and built sleds of a peculiar form and construction. Like the Gilyak sleds, the Kamchadal sleds, too, were characterized by their extreme lightness, flexibility, and durability; /488/ but whereas the former are shallow and low, the latter had a relatively high-placed and deep sled-basket, on which the dog-driver usually sat side ways and only at times astride. Later the Russians in Kamchatka adopted this type of sled and have them even today (1). Besides them,

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1. Several sleds of this type brought from Kamchatka in the previous century have been preserved in the Anthropological-ethnographic Museum of the Academy.

however, they were also, even in Steller's time, and especially for the transportation of heavier loads, using the above-mentioned long and broad-soled dog-sleds or narten (2) such as are also

2. Steller (op. cit., p. 370) calls them "narden."

customary elsewhere in Siberia. They may therefore have already been familiar with them before their arrival in Kamchatka. There is no reason to assume with Matjuschkin (3) that the Russians first

NS 492 114 177 [113]

3. Vrangel', Putesh. po siev. ber. Sibiri i po Ledov. moriu, Part II, p. 110, footnote *.

I: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4
Kamchadal RY3

XV. — CHARACTERISTICS OF KORYAK MYTHS

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The general features of Koryak mythology have been discussed in Chapter VII (pp. 115 et seq.). In general character the mythology of the Koryak, Kamchadal, and Chukchee shows many similarities.

Comparison with Kamchadal Mythology. — All that we know of the Kamchadal mythology from Steller,[1] and from the Kamchadal myths given in Chapter XIV, leads to the conclusion that the Koryak and the Kamchadal had one and the same folk-lore. Steller relates only two complex myths, — one containing the story of Kutq's adventures with the mice, and the other telling of his love-affair with Excrement-Woman. The former myth will also be found among the Kamchadal tales in this book,[2] and both tales occur among the Koryak myths.[3] Besides, when summing up the general characteristics of Kamchadal mythology, Steller says that the entire folk-lore of the Kamchadal consisted of indecent tales about their god Kutq (Raven), as Steller calls the founder of the Kamchadal world. In this respect Kamchadal mythology corresponds closely to that of the Koryak, and forms a clearly defined cycle, consisting exclusively of raven myths. It may therefore be stated without hesitation that whatever is true of Koryak folk-lore is just as true of that of the Kamchadal.

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Steller also mentions three separate episodes from tales about Kutq which he had heard told. In the first of these episodes, Kutq's gluttony is described. He reaches a river, and sees the ground on the opposite bank covered with berries. Being unable to cross the river, he cuts off his own head, and throws it across, so that it may eat the berries.[4] The second episode, which is illustrative of the concupiscence of Kutq (who tried to have sexual intercourse with all objects that he met), relates that he once found a valved shell on the seashore, with which he had intercourse. The valves closed, and cut off his penis.[5] This calls to mind the tales about the vagina armed with teeth. The third episode, which reflects the coarse tendency of the Koryak imagination in general, tells how Kutq once took Chāchȳ (thus Steller calls Raven's wife) for an underground house, her vulva for the entrance-opening, and her anus for the underground passage of the ancient Kamchadal house, which was used for a draught.[6] He entered the house through the vulva, found the liver, and was about to take it, when it began to move. Then he became frightened, and ran out of the underground house.[7] In the Koryak tale, Big-Raven entered Miti"'s anus as though it were the entrance to an underground house.[8]

[1] Steller, pp. 253-284. [2] Tale 131 (p. 329).
[3] Tales 88, 121, 130 (pp. 260, 326, 324). [4] Steller, p. 262. [5] Ibid., p. 263.
[6] See pp. 14, 53; Steller, p. 212. [7] Steller, p. 263. [8] Tale 25 (p. 169).

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4
Kamchadal RY3
Chukchee RY2

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It is important to point out here some peculiarities of the present Kamchadal myths as compared with those related by Steller, and with the Koryak myths. In the myths collected by Mr. Bogoras, adventures are ascribed to Kutq and to members of his family, which, among the Koryak, are told about kalau.[1] For instance, in one tale[2] Miti′ cuts off her nose and lips, and catches the mice which are in her light; but the Fox sets the mice free, and finally kills Miti′ by throwing her down a rock. In Koryak tales[3] all this is told with reference to a kala-woman. I am inclined to attribute this divergence to the effect of Russian influence. The Kamchadal adopted Christianity long ago, and in a certain sense they are devout Christians, while the Russian priests constantly try to persuade the natives of Siberia who have been converted to Christianity that their former gods are devils and evil spirits. Thus, the Yukaghir of the upper Kolyma, in my presence, called their ancient guardian-idol, which was hanging in the woods, "Satan;" and the scaffold graves of their ancestors, and those above ground, which they used to worship, the Russianized Yukaghir of the Lower Kolyma now call "the graves of the perished (могилы пропащихъ)," an expression which is otherwise applied to animals only; and they remained quite indifferent when I proceeded to open those graves.[4]

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Comparison with Chukchee Mythology. — The relation of the Koryak folk-lore to that of the Chukchee is somewhat different from its relation to the Kamchadal folk-lore. As may be seen from the publications of Mr. Bogoras,[5] the influence of the Eskimo myths upon Chukchee folk-lore was greater than that upon Koryak folk-lore; and the cycle of raven myths is therefore less preponderant than that of the Koryak. Big-Raven and Raven-Man of the Koryak are merged into one person named Ku′rkıl (Raven); and the Creator of the Koryak myths, identified among the Koryak with Big-Raven, appears among the Chukchee (with the exception of the passages enumerated before)[6] as a being independent of Ku′rkıl, but the same as the Supreme Being. From this we may draw the conclusion that the raven of the Chukchee, owing, perhaps, to the effect of their contact with the Eskimo, has lost its place as the ancestor of the tribe, and remains merely a hero of the animal epos. On the other hand, the Chukchee have retained more cosmogonic tales about the raven than the Koryak, which, however, might be explained by the fact that Koryak folk-lore is on the decline. Incidents of maritime life, which are very prominent in the Koryak myths, are even more prevalent in those of the Chukchee, where they assume a coloring of Eskimo life.

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[1] Tales 32, 56, 79, 112 (pp. 181, 212, 246, 402).

[2] Tale 131 (p. 331).

[3] Tales 32, 56 (pp. 181, 212).

[4] It must be noted here that in one Koryak tale of Kamenskoye (Tale 108, p. 295), Big-Raven's son, Eme′mqut, appears as a cannibal in the same manner as the monster gormandiser of Tale 112, p. 302. This may also be ascribed to Russian influence.

[5] Chukchee Materials, Introductory; Anthropologist, pp. 682, 683.

[6] See p. 17.

CHAPTER III

THE COUNTRY AND SOMATOLOGY OF THE KAMCHADAL

GEOLOGICAL PAST OF KAMCHATKA

183 172 Professor Obruchev[1] says that at the end of the Miocene Epoch the western shore of Kamchatka was sinking, and Professor Bogdanovich[2] supposes that during the Pliocene Epoch a considerable part of the present western and eastern shores of the peninsula were still covered with water. The beginning of the Quaternary, says Obruchev, evidently formed a continental phase which set in after the sinking phase of the Mio-Pliocene Epochs; the land in Siberia reached its maximum extension; the Bering Strait did not exist as yet, and the Chukchee Peninsula was connected with Alaska, and therefore the northeast of Siberia must have had a milder climate than at present. But all these are geological periods which preceded the appearance of man.

The Pleistocene Epoch, which is associated with the existence of man, may be proved in the valley of the Kamchatka River, according to Bogdanovich, by the frequent occurrence of remains of the mammoth and the *Bison priscus*. But nothing is said about the remains of man. In many places of Siberia man was contemporaneous with the mammoth, but there is a question whether the same was true in Kamchatka. About the end of the Pleistocene Epoch, says Bogdanovich, there was an extensive glaciation in many places of Kamchatka.

These climatic changes do not interfere with our theory of the migration to America of the Siberian-Americanoid tribes, including the Kamchadal, in one of the Interglacial Epochs, and of their remigration to northeastern Siberia after it was released from the ice.

But especially on the Kamchatka Peninsula must it be noted that our theoretical considerations are proved by archæological evidence.[3] No artifacts of the palæolithic man were discovered by the author on Kamchatka, and it is possible that no man lived during the old stone age on the Kamchatka Peninsula. It remains, however, for the future to prove or disprove it. In order to clear up my doubts in this respect I communicated with my friend the Russian geologist, Professor I. P. Tolmachoff, now curator of the Department of Invertebrate Palæontology of the Carnegie Museum, Pittsburgh, Pennsylvania. He is well known by his explorations in northeastern Siberia. He writes that it is hardly proper to conclude that man lived in the Kamchatka River valley in the Pleistocene Epoch on the only ground that remains of mammoth and *Bison priscus* were found there. Mammoth and man very often were neighbors but, as it seems, this dependence

[1] W. A. Obruchev, *Geologie von Siberien*, Berlin, 1926.
[2] Karl Bogdanovich, *Geologische Skizze von Kamtschatka*, Petermann's Mitteilungen, Band 50, 1904, pp. 66, 198, 217.
[3] Waldemar Jochelson, *Archæological Investigations in the Aleutian Islands*, Pub. No. 367, Carnegie Inst. Wash., 1925. *Idem, The Ethnological Problems of Bering Sea*, Natural History, Jour. Amer. Mus., Jan.–Feb., 1926, vol. xxvi, No. 1, pp. 90–95.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

133 was not necessarily mutual. Man might follow the mammoth in order to hunt him, but the mammoth had no need of man. Thus the remains of mammoth do 172 not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the 631 south, from the Amanino village to the west, and Osernaya River to the east—was a R. part of the Primorskaya Province. In 1909 a new province of Kamchatka was created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky, 177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven villages (between Amanino and Sopochnoye) of the western coast have preserved 197 their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They 226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and salteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 200 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

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	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	3.4	1,495 mm.	4.8
Length of head	188 mm.	6.8	183 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.4
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

114 In the beginning of the seventeenth century the Japanese Government pro-
177 hibited all navigation beyond its home waters, and before the Russians conquered
459 Kamchatka the Kamchadal were not acquainted with the use of metals. How-
172 ever, there is no doubt that some iron instruments and other Japanese goods had
325 reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

000 It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.
[2] According to Krashenninikoff (vol. II, p. 49, in Russian) the Kamchadal called a needle "shish" and the Japanese as producers of needles "shishaman."

[Pp. 22-36 have not been included in the file --Analyst]

CHAPTER VI

ARCHÆOLOGICAL REMAINS FROM THE KAMCHATKA EXCAVATIONS

SOURCE MATERIAL FOR STONE IMPLEMENTS

324 The following is a list of minerals of which the Kamchadal manufactured their stone implements and weapons. The minerals are given in the order of their diminishing hardness:

1 Flint
2 Hornstone schist
3 Quartz schist
4 Quartzite
5 Jasper (variety of quartz)
6 Chalcedony (agate)
7 Andesite
8 Obsidian, andesitic
9 Augite, andesitic
10 Porphyrite
11 Sandstone
12 Quartz slate
13 Marble
14 Slate
15 Red ocher
16 Volcanic tuff
17 White clay

171 While on the Aleutian Islands[1] no flint implements were found, a considerable number of arrow heads and other implements excavated by the author in Kam-
324 chatka were made of flint, according to the determination of a mineralogist, Professor A. G. Titov of the University of Moscow. The Aleut used andesite, instead of flint, most frequently for stone implements; the Kamchadal very seldom used this material, preferring the massive varieties of quartz and, partly, obsidian.

Soapstone, of which the Eskimo manufacture their lamps, is not met in Kamchatka and the Kamchadal use harder minerals for lamps, as will be seen later.

LOCALITIES WHERE EXCAVATIONS WERE MADE

172 The present writer made excavations in the following places:

(1) On the shore of Salt Lake on the isthmus in the Avacha Bay, August 19, 1910.
(2) In the Bogatyrevskaya Bay, above Salt Lake, in the forest, August 20, 1910.
(3) Cup-like holes were excavated not far from Salt Lake in afternoon of the same day.
(4) On the slope of the hill on the northeastern side of the Bogatyrevskaya Bay, August 21, 1910.
(5) In the village Syeroglaska, 10 miles from Petropavlovsk, August 25, 1910.
(6) In the village Savoiko, August 29–30, 1910. Savoiko is located on the left bank of the Avacha River, 16 miles from its mouth. Formerly it was called Stary Ostrog and renamed Savoiko after the Governor of Kamchatka (1850–1855), the senior captain and later admiral, V. S. Savoiko.

For numbers 1 to 6, see map of the Avacha Bay (p. 42).

(7) On the bank of the Nalacheva River, September 19.
(8) On the shores of the Nalacheva Lake, September 20 to 24, 1910.
(9) On the Nalacheva Cape, September 26–30, 1910.
(10) Ancient site on the mouth of Kulki River, emptying itself into the Tighil River, 4.6 miles from its mouth, June 10, 1911.
(11) Ancient site on the mouth of Kavran River, June 27 to July 6, 1911.
(12) On the bank of Osernaya River, 2 miles from Kuril Lake, August 6, 1911.
(13) On the Siwusk Cape in Lake Kuril from August 9 to August 14, 1911.

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 58.

[pp. 38-40 have not been included in the file -- Analyst]

172
262

Of the above localities, Numbers 1 to 12 yielded the following sites:

SITE 1

On a hill above Salt Lake there were several pits, which could not be noticed at first sight as they were covered with an abundant overgrowth of the shelamainik (*Filipendula kamtschatica* Max.) and horse-tails (*Equisetum heleocharis* Ehrh.) 6 feet high. The staple food of the old Kamchadal fishers consisted of different salmon species, the bones of which in decaying formed an excellent fertiliser for the soil. In my work on the Aleutian archæology I pointed out that no bones of salmon were found in excavations of ancient village sites on the Aleutian Islands, contrary to the statements of Dr. Dall for the Aleutian Islands and Professor Emile Rivière, cited by Professor MacCurdy, concerning finds in a cave near

1. Salt Lake.
2. Bogatyrevskaya Bay.
3. Isthmus above the Salt Lake.
4. Slope of hill on the northeastern side of Bogatyrevskaya Bay.

2

Menton, France.[1] In his *Human Origin*, Professor MacCurdy[2] cites Mr. Abbo as having found on a skeleton excavated in Verneau, France, perforated salmon vertebræ, evidently worn as ornaments. It would be interesting to determine whether the vertebræ were really of salmon, and not of some other species of fish. As I have stated, the soft bones of *Salmonoidea*, which ascend rivers and fresh-water lakes for spawning, decay rapidly, falling to pieces in 2 or 3 years.

Professor R. Torii[3] referring to remains of food found in his archæological excavations in Manchuria tells of fish bones, the species of which could not be determined because they were only a heap of powder. These were undoubtedly salmon bones.

[1] Waldemar Jochelson, *Archæological Investigations in Aleutian Islands*, p. 139; W. H. Dall; *On Succession in the Shell Heaps of the Aleutian Islands*, Contributions to North American Ethnology, vol. 1; Washington, 1877, pp. 41-91; G. G. MacCurdy, *The Field of Paleolithic Art*, American Anthropologist, vol. 26, No. 1, Jan.-Mar., 1924, p. 41.

[2] George Grant MacCurdy, *Human Origins*, vol. 1, p. 262.

[3] R. Torii, *Populations Préhistoriques de la Mandchourie Méridionale*, Jour. College of Science, Tokyo Imperial University, 1913-1915, vol. XXXVI, Art. 8, p. 48.

172 As it was not an easy piece of work to cut away the heavy stalks of the coarse vegetation, we excavated only one pit, in which but few specimens were found. The hill was 9 feet high over the lake. The pit, after the vegetation was cleared, was 5 feet deep. Then followed a 3-foot layer of dark mold and a layer of yellow clay without any trace of cultural remains. No unperishable remains of building material were found. Specimens found in the mold layer were:

(1) A piece of rude pottery (2157).[1]
(2) A stone implement, not finished (2158).
(3) A stone hammer (2159).

SITE 2

There were 4 pits over the lake. The layer of mold was very thin and yielded only two specimens:

(1) A fragment of a stone lamp (2160), very primitive.
(2) An obsidian arrow point, not finished (2161).

SITE 3

Not far from the lake, right over the sea, about 3 feet high were many circular shallow pits on the flat gravel in which no cultural remains were found. My Kamchadal laborers could not explain the origin of these pits. They are probably traces of round tents of a military camp of the European allies who landed in Kamchatka during the Crimean war.

SITE 4

There were several pits with remains of burnt wood and stones in the dark soil, to the depth of 3 feet, but no other refuse. A yellow sand formed the base of the pit.

SITE 5

A pit was excavated to the depth of 4.5 feet. A layer of 3 feet contained cultural remains. There were found charcoal, burnt stones, bones of seals and shells of mollusks (*Katharina tunicata* Wood and *Modiola modiolus* L.) and the following specimens:

(1) A flint arrow point (2162).
(2) A polished marble object resembling a labret (2163), but it must be noted that no labrets were used as personal ornamentations by the ancient Kamchadal.
(3) A stone ax.

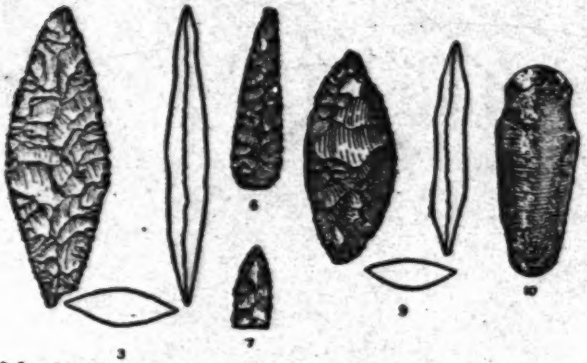
SITE 6

Two pits were excavated near the village Savoiko.

Pit A: The depth before digging was 3 feet 8 inches and a shaft was cut 5 feet 2 inches deep. The layers were as follows:

(1) Yellow sand covered with grass, 1 foot high.
(2) Volcanic ash, 5 inches deep.
(3) Fine gravel, 1 to 2 inches.
(4) Dark-brown sand with roots of plants, 2 feet 7 inches.
(5) Black soil with organic remains, 2 inches.
(6) Brown sand, 1 inch.

[1] The catalogue number is shown in parenthesis.



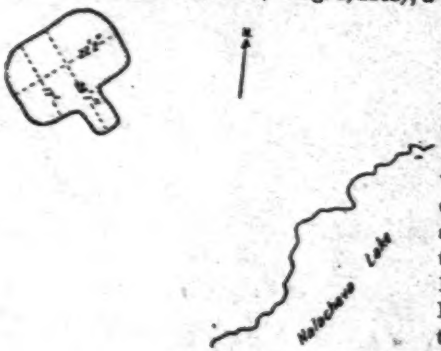
3. Laurel leaf-like blade of dark greyish flint.
6. Arrow blade of green jasper.
7. Arrow flint blade.
9. Blade of black obsidian.
10. Stone pestle of quartz slate.

All of Nalacheva Lake.

Pit B: Length, 24.7 feet; width, 22.2 feet. The entrance was directed to the east. We excavated 6 feet 7 inches deep until a single layer appeared. Separate layers were:

(1) Organic remains and roots of plants, 2 feet.
(2) Gray sand and volcanic ash, 2 feet 6 inches.
(3) Yellow sand, 2 feet 1 inch.

Pits A and B yielded the following finds: 1 stone ax (2165); 1 obsidian arrow or harpoon point (2166); a piece of pottery (2167); a laurel leaf-like blade of dark greyish flint with fine trimming on both sides. Length, 91 mm.; greatest width, 32 mm.; thickness, 11 mm. (see fig. 3, 2168); a stone arrow not finished; and two stone hammers (2170 and 2171).



4
Pit No. 1, Nalacheva Lake.

SITE 7

My party left Petropavlovsk on horseback on September 13 at 12.30 afternoon and reached the village Khalakhtyrka at 6 in the evening. The route lay through a low ridge and by the shore of the Khalakhtyrka Lake. The last 1.3 miles we moved along the Khalakhtyrka River, a most picturesque country. We passed the night in Khalakhtyrka village. A stone celt found while building a

172 blockhouse was given to me (2209). We left Khalakhtyrka in the morning of September 14. We, and our laborers, had to walk, as I could get only four pack horses for our freight, and the horses and drivers from Petropavlovsk had to return to that place. When it became dark we put up our tents and stopped for the night, only 1.3 miles from the Nalacheva River.

In the morning of September 15 we left our camp, and about 3 o'clock in the afternoon crossed the river in two small boats. Usually one boat is left on each bank for the use of travelers. You cross the river in the boat, taking a part of your freight with you, and coming back with two boats you carry over the remaining freight and passengers. There are also some planks leaning on trees, by which you can bridge the two boats in order to take over heavy freight or to cross more safely. The river is quite wide and has a strong current. The horses, freed from their pack or riding saddles, are driven into the river and forced to swim across. After crossing the river the travelers have to return both boats to their proper places.

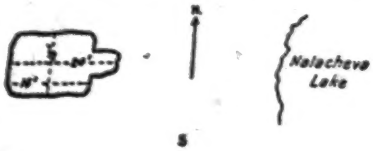
On September 16 we passed the sites on the Nalacheva River and between the river and Nalacheva Lake. September 17 to 19 we excavated two sites on the Nalacheva River, one 6 feet 2 inches deep, the other 4 feet 7 inches deep. In none of them were artifacts found, except burned stones in the center—traces of former hearths.

On the shores of the Nalacheva Lake excavations were made on September 20 to 24, 1910. Traces of pit-dwellings[1] were discovered all around the lake, showing that the place had been densely populated.

Pit No 1 was 3 feet 10 inches before digging (fig. 4). The hearth, 1 foot deep after digging, was opposite the entrance passage. In the corners of the northeastern side burned wood was found instead of posts. On the west, in a hole 2 feet deep, a rotten post, the lower end of which had been partly preserved, was still standing. The entrance passage was 10 inches deep before digging. The pit was covered with the grass of meadow-sweet (*Filipendula kamtschatica* Max.), spear-grass (*Calamagrostis langsdorfii* Trin.) and *Pleurospernum kamtschaticum* Hoffm. of the Umbelliferæ.

The distances between the inner posts were 6 feet and 7 feet 2 inches. The following artifacts were found:

(1) A fragment of an obsidian arrow point, not finished (2194).
(2) A stone arrow point (2194).
(3) A stone arrow point, not finished (2195).
(4) Five fragments of pottery.



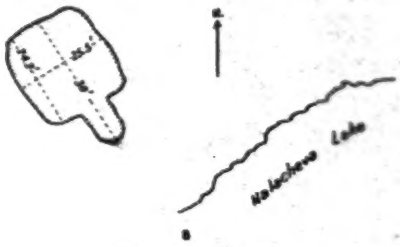
Pit No. 2 (fig. 5) was 16 by 15 feet. The length of the entrance passage was 8 feet. Before digging the depression was 4 feet, and the pit was excavated to a

[1] The sketches of the depressions, the outward evidences of ancient underground dwellings, are given in a somewhat irregular form, as they were drawn by the writer in the field. The irregular configuration of the cavities may be explained by the falling in of parts of the earthen walls.

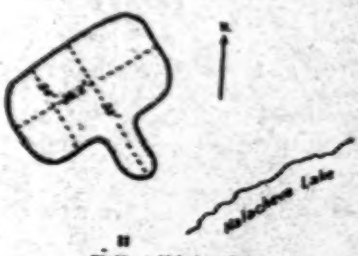
172 depth of 1.5 feet only. Yellow sand without cultural remains followed. The following artifacts were discovered:

(1) Fig. 6 (2206). An arrow blade of dark green jasper, with a rounded base, well finished, the point being broken off. Length, 55 mm.; greatest width, 15 mm.; greatest thickness, 11 mm.
(2) Fig. 7 (2207). A fragment of a small obsidian point, similar to an Aleut surgical lancet.[1]
(3) A fragment of the lower part of an obsidian arrow point (2208).
(4) A stone celt (2210).
(5) A piece of pumice for polishing stone implements (2211).
(6) Fragments of two clay pots.
(7) In the entrance passage a piece of pottery with an inside ear was found.

In the morning of September 21, 1910, the temperature was 3° C.; in the afternoon snow was falling.



Pit No. 3, Nalacheva Lake.



Pit No. 4, Nalacheva Lake.

Pit No. 3 was 2 feet 5 inches deep before digging, and was excavated to the depth of 4 feet. The following artifacts were discovered in this pit (fig. 8):

(1) An arrow point of rock crystal (2192).
(2) A fragment of a stone celt (2191).
(3) A stone celt (2205).
(4) A stone arrow point (2197).
(5) An obsidian arrow point in the form of a laurel-leaf, black with red veins. Length, 64 mm.; greatest width, 27.5 mm.; greatest thickness, 9 mm. Illustrated in fig. 9 (2198).
(6) A whetstone for grinding and polishing (2199).
(7) A stone chisel (2200).
(8) Fig. 10 (2201). A polished cylindrical pestle of grayish quartz slate for grinding paints or possibly food, made of edible plants mixed with animal fat or oil. Near both ends of the implement traces of pecking with a hammerstone may be seen, perhaps for making grooves. Length, 62 mm.; greatest diameter, about 23 mm.

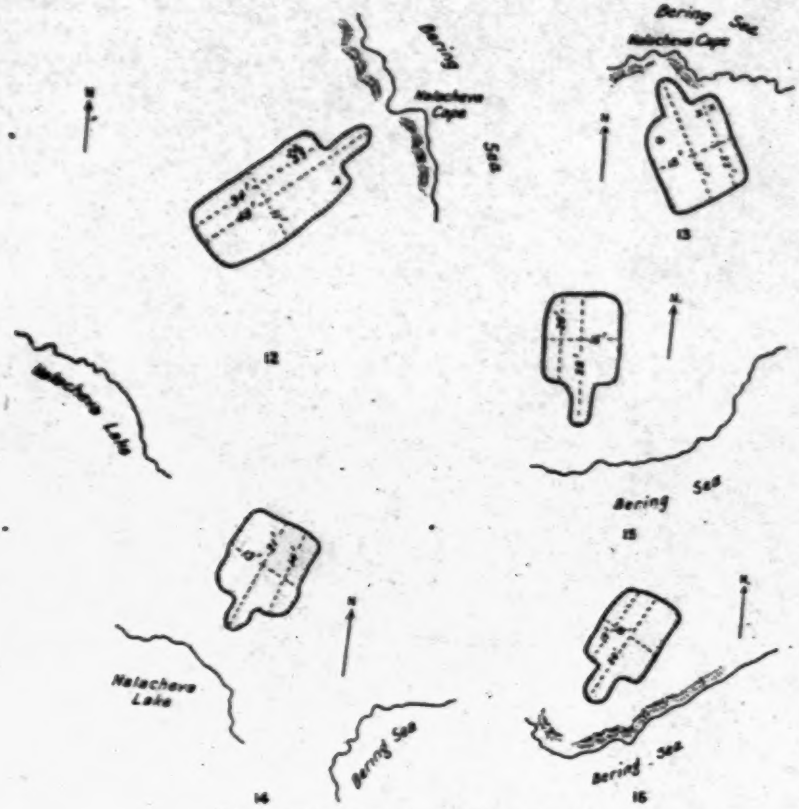
Before digging, Pit No. 4 was 4 feet deep, and it was excavated to the depth of 7.5 feet (fig. 11). Artifacts discovered were:

(1) A stone celt (2202).
(2) A piece of rock crystal with traces of an arrow point (2203) having been manufactured from it.
(3) A small obsidian arrow point (2204).

At Site 9, on the Nalacheva Cape, diggings were made on September 26 to 30, 1910.

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 98, fig. 18.

5: Jochelson A-5 (1910-11) 1928 Kamchadal



Figs. 12 to 16, showing Pits 1 to 5 on Nalachevo Cape.

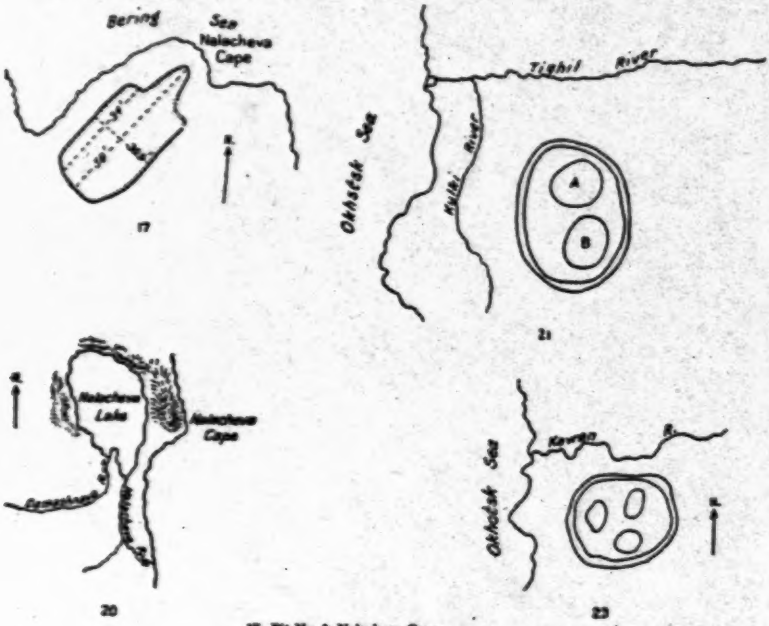
Pit No. 1 before digging was 2 feet 6 inches deep and was excavated to the depth of 3.5 feet. In the right corner from the entrance there were found hearth stones and on them were some shells of the mollusk *Mytilus edulis* L.; a broken clay pot was also found. The following artifacts were discovered in this pit:

(1) A flat obsidian arrow point (2178).
(2) A fragment of such a point (2179).
(3) A small obsidian arrow point (2180).
(4) A piece of obsidian in process of arrow making (2181).

Before digging, pit No. 2 was 2 feet 4 inches deep and the excavation was carried to the depth of 4 feet. X (fig. 13) shows the place where a complete clay pot with

172 handles inside was found; O, where fragments of another pot were found. The diameter of the rim of the complete pot was 1 foot 6.25 inches, of the bottom 11 inches, and the height of the pot was 8 inches. The pot was discovered at a depth of 3 feet 4 inches. The pit before digging was covered with *Empetrum nigrum* L., *Epilobium angustifolium* L., bushes of the wild rose (*Rosa acicularis* Lindle), the fern (*Cryptogramme acrostichoides* R. Br.) and other plants, and it took much time to clean the pit before digging. The following stone artifacts were found:

(1) Two rudely made arrow points of quartz (2172).
(2) Four obsidian arrow points.



17. Pit No. 6, Nalacheva Cape.
20. Sketch of Nalacheva Lake and Cape.
21. Sketch of ancient site of Kulki River.
23. Sketch of ancient site of Kavran River.

The depth of Pit No. 4 before digging was 2 feet 4 inches and it was excavated to the depth of 3.5 feet. Only two obsidian arrow points were found (2184, 2185).

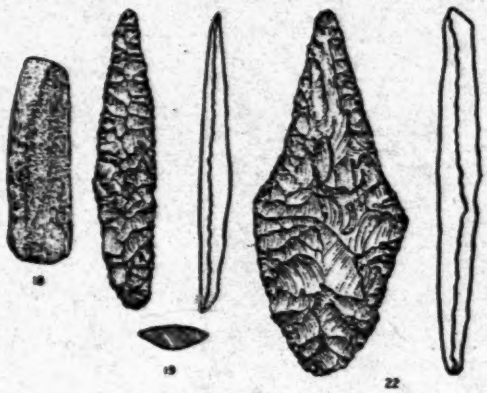
Pit No. 5 before digging was 2 feet 2 inches deep and excavation was done to the depth of 3 feet 8 inches. Artifacts found were:

(1) A stone celt (2187).
(2) An obsidian arrow point, not finished (2188).
(3) A fragment of a thin obsidian arrow point.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

172 The depth of Pit No. 5 before digging was 3.5 feet and it was excavated to a depth of 3.5 feet. The following artifacts were found:

(1) Five fragments of a clay pot, 2 with ears inside (2214).
(2) A broken stone ax.
(3) Three pieces of pumice for polishing stone implements (2216).
(4) Fig. 19 (2222) a-c. A flint blade for an arrow or throwing dart. Judging by the asymetrical curving it is not finished. Length, 90 mm.; greatest width, 19 mm.; greatest thickness, 7 mm.
(5) A fragment of a stone wedge (2223).
(6) A fragment of a stone implement (2224).
(7) Fragments of one clay pot (2239).
(8) Fragments of another clay pot (2240, 2241).



18. Chisel of quartz schist, Nalacheva Cape.
19. Flint blade, Nalacheva Cape.
22. Lance point of flint, Kulki River.

The depth of Pit No. 6 before digging was 3 feet 10 inches and it was excavated to the depth of 4 feet. Artifacts found were:

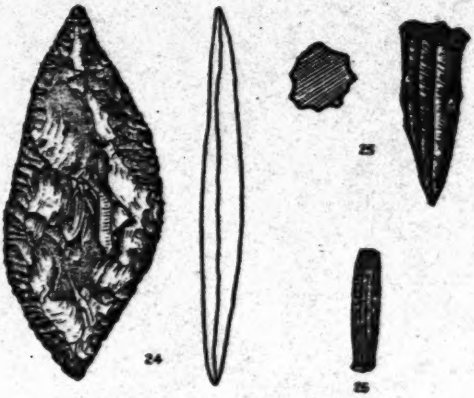
(1) A stone celt (2182).
(2) Fig. 18 (2183). A chisel of greenish gray quartz schist, polished. Length, 62 mm.; greatest width, 20 mm.; width of blade 18 mm.
(3) Three pieces of pumice for polishing stone implements.
(4) A big piece of pumice, with a hole for hanging (2226).
(5) A stone lamp (2228).
(6) Two stone sinkers (2229, 2235).
(7) A stone lamp (2239).
(8) A fragment of a stone ax (2231).
(9) A flat stone sinker (2232).
(10) A fragment of a stone wedge (2233).
(11) Eleven pieces of white clay (2234).

The sketch of map (fig. 20) was drawn by the son of the Governor of Kamchatka, Boris Perfilyev, a naturalist, who accompanied me on my trip to the Nalacheva region. No scale is given.

172 The following specimens, presented by Governor Perfilyev, were found by Mr. Eckermann, a representative of a fishing company, while digging a cellar in Palan.

(1) Ten pottery fragments with traces of impression of basket work (2217).
(2) A pottery fragment with a hole near the rim.
(3) A pottery fragment with an impression of weaving (2219).
(4) An arrow point of rock crystal (2220).
(5) A fragment of a stone implement.

The Kulki River empties into the River Tighil, 4.6 miles from its mouth. The site is located 1,738 feet from the mouth of Kulki on a hill over the right bank of the river. There were traces of an earthen wall which surrounded the site. The length of the hill was 76 feet; the width, 60 feet. Inside the wall were the remains of two pits, A and B, almost circular in form. The length of pit A



24. Knife-like implement of opaque black flint. Kulki.
25. Nucleus of tawny gray flint. Kavran.
26. Flint nucleus with 12 tiny facets. Kavran.

was 36 feet and its width 25 feet; the length of pit B was 25 feet and its width 21 feet. The digging was done on June 10, 1911, and the soil was still frozen from one foot down. The earth had to be thawed out by fire piles before the digging, thus hampering the work. Some specimens were broken while spading the dirt. The following specimens were found:

(1) Fourteen stone arrow points and other implements (2690–2703). The greatest length was 114 mm.; the smallest, 55 mm. One of the weapons (2692) is illustrated in figure 24 a-b. It is a knife-like implement of opaque black flint. As both asymmetrical sides are trimmed, it looks rather to be a newly finished blade of a lance. The implement is very thin for its size. Length, 114 mm.; greatest width, 49 mm.; greatest thickness, 11 mm.

(2) Eighteen pottery fragments with ornaments (2704).

(3) Fifteen stone implements (2705–2719). One of these specimens is illustrated in figure 22 (2712) a-b. It is a lance point of black flint. The stem is thicker than the point. Carefully chipped, the edges are steeply trimmed. The stem was evidently intended to be inserted into a

172 wooden shaft. Length, 110 mm.; greatest width, 47 mm.; smallest width, 10 mm.; thickness of the narrow end, 9 mm.; of the broad end, 8 mm. Fig. 22, b, shows the side view.

(4) A long stone arrow point (2723).
(5) A stone ax (2724).
(6) Three stone arrow points, not finished (2725–2727).
(7) Stone pestles (see site Kavran, 2729–2733).

173 On the right bank of the Kavran River, in 6 minutes' walk from its mouth, a site surrounded by a wall of earth was dug out. Within the wall there were three almost circular pits as shown in figure 23. According to a tradition this was the fortified place of Kulki, a strong man of Koryak origin, who used to cross the central mountain ridge of the peninsula in order to fight the chiefs of the Kamchatka valley. The digging of the site was carried to the depth of 2,247 mm., 172 the frozen soil reaching to the depth of 2,095 mm. The shaft dug represented the following layers:

1027 mm.	a layer of turf (A).
1287	clay containing (B) organic remains.
1522	charcoal, implements, organic remains and clay (C).
1797	clay containing very little organic remains (D).
2167	yellow clay (E).
2247	shingle (F).

The excavation of the site was continued from June 22 to July 10 inclusive. As the soil was still frozen it had to be thawed by burning wood, layer after layer. This, however, did not prevent the breaking by the spade of some of the artifacts while digging. Almost all of the artifacts were found in layer C, and very few of them in layers B and D. The fact that artifacts were discovered only at a certain depth bears witness of the antiquity of the site. The following objects were found:

(1) 24 stone arrow points; the largest is 100 mm. long and the smallest 21 mm. (2665–2688). Of these the following are illustrated: figure 30 (2666), a–c, a laurel leaf-like blade of black flint with some defective trimming. Length, 99 mm.; greatest width, 32 mm.; greatest thickness, 12 mm. Figure 36 (2667), a–b, an obsidian blade of a laurel leaf-like shape, nicely trimmed. Length, 48 mm.; greatest width, 17 mm.; thickness, 10 mm. Figure 29 (2668), a–c, an arrow point of black flint, with small facets and symmetrical sides finely trimmed. Length, 60 mm.; greatest width, 16 mm.; greatest thickness, 8 mm. Figure 35 (2685), a small arrow blade of black flint. Length, 21 mm.; greatest width, 10 mm.; greatest thickness, 4 mm.

(2) Fragments of pottery (2689, 2720, 2721).

(3) A stone ax of quartz limestone (2728).

(4) A lance point of tawny gray flint, rudely chipped, evidently not finished. Length, 222 mm.; greatest width, 44 mm.; greatest thickness, 40 mm. See figure 33 (2723).

(5) Five stone pestles (2729–2733) of the sites Kulki and Kavran, used for grinding food of edible plants and roots mixed with meat, fat or animal oil. The largest found in Kavran was 228 mm. long and is illustrated in figure 28 (2733) a–b. Made of quartz slate.

(6) Three fragments of Japanese porcelain cups (2746).

(7) Two pieces of iron (2745).

(8) Shells of mollusks (2747).

(9) 35 fragments of bone arrow heads (2747a).

(10) The bone part of a root digger (2748), in Kamchadal qasqar.

(11) The same as No. 10 (2749).

(12) A bone arch which served as stanchions of an ancient Kamchadal dog sledge, in Kamchadal mean. Illustrated in figure 31 (2750), 4/15 of natural size.

(13) Two bone hooks (2751, 2752). The first hook is illustrated in figure 43, 1/3 natural size; the second in figure 50.

(14) Fragments of bone implements (2753–2756).

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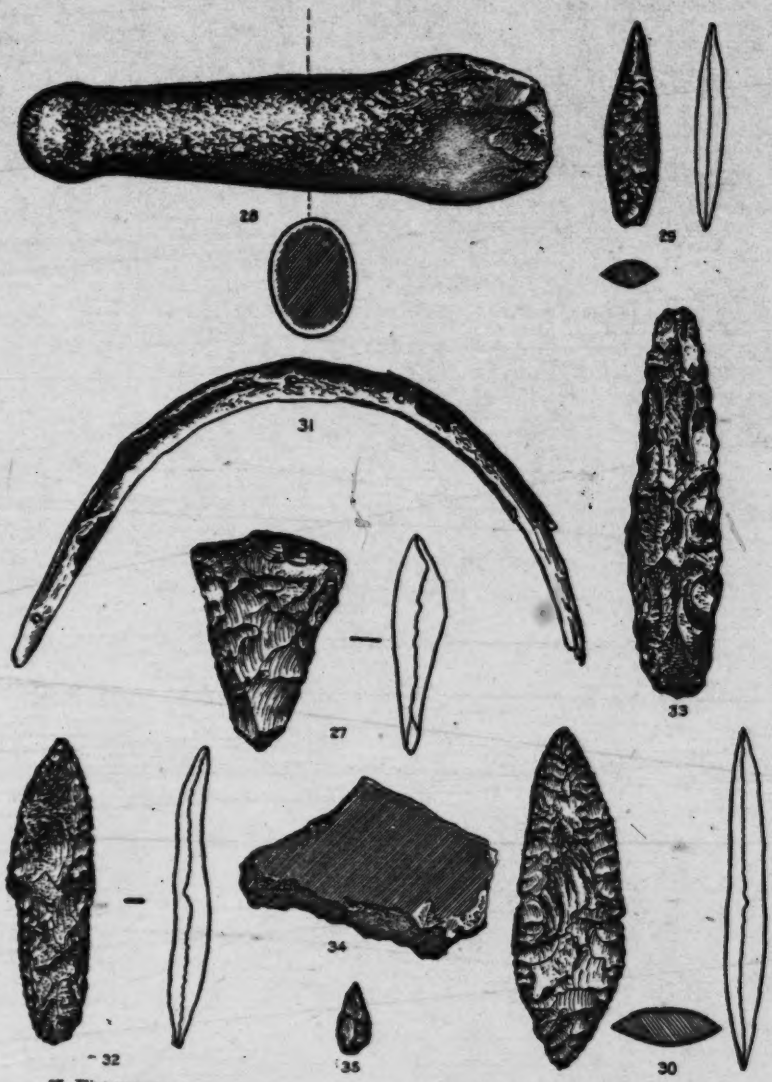

27. Flint scraper.
28. Stone pestle of quartz slate.
29. Arrow point of black flint.
30. Laurel leaf-like blade of black flint.
31. Bone arch of an ancient Kamchadal dog sledge.
32. a-b, implement of silicified black slate.
33. Lance point of tawny gray flint.
34. Whetstone of volcanic tuff.
35. Small arrow blade.

All of Kavran.

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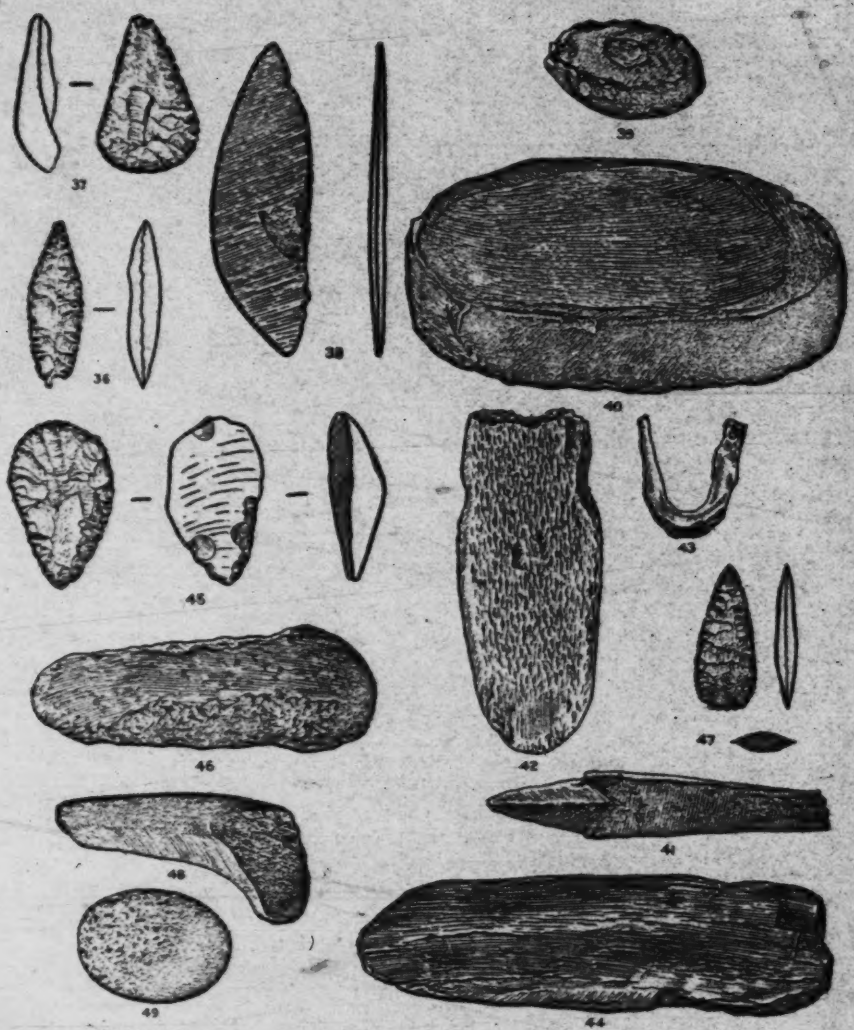
(15) Two bone spades (2757, 2758).
(16) The bottom of a Japanese porcelain cup (2759).
(17) A piece of pumice (2766).
(18) A whetstone (2767), for polishing stone implements, of volcanic tuff. Illustrated in figure 34, 4/9 of natural size.
(19) 27 stone arrow points (2768–2794). Of these specimens the following are illustrated: figure 25 (2768), a nucleus of tawny gray flint from which flakes had been evidently obtained by striking with a hammerstone vertically from above; nine facets; the horizontal plane is assymetrical. Length, 49 mm.; horizontal plane, 21 by 18 mm. Figure 26 (2786), a flint nucleus of a little darker tint than the preceding one, of a cylindrical shape, with 12 tiny facets. Length, 35 mm.; the transverse plane section, 9 by 8 mm. Figure 27 (2775) a–b, a scraper of black flint, nearly triangular, slightly rounded and finely trimmed on the working edge, which has a hollow from one side. The other two sides of the triangle are irregularly trimmed and rudely chipped. The top end might serve as a graver. Greatest length, 62 mm.; greatest width, 45 mm.; greatest thickness, 13 mm. Figure 32 (2772) a–b, an implement of silicified black slate. Evidently a knife for working in wood. The straight stem might be kept as a handle or inserted in a wooden handle. The edge for cutting is somewhat curved. Length, 88 mm.; greatest width, 25 mm.; greatest width of the stem, 10 mm., thickness of the blade, 8 mm.
(20) 17 stone implements (2795–2811). Of these specimens the following are illustrated: Figure 37 (2795), a–b, scraper of black obsidian almost triangular in form, with a rounded working blade and shallow, enlongated, finger-like facets. From one side both edges are retouched, the other side has only one edge retouched. Greatest length, 47 mm.; greatest width, 31 mm.; thickness, 12 mm. Figure 38 (2801) a–b, a woman's tailoring knife, polished from both sides, similar to the Aleut-Eskimo women's knives of the same kind. There were evidently holes on the upper part for fastening to a wooden handle. Greatest length, 93 mm.; greatest width, 30 mm.; thickness, 2.5 mm.
(21) Nine stone implements (2812–2839).
(22) Six bone implements (2821–2826).
(23) Thirteen bone implements (2827–2839).
(24) Nine bone implements (2840–2848).
(25) Five bone implements (2849–2853).
(26) Nine fragments of bone implements (2854–2862).
(27) One bone implement and 12 pottery fragments (2863–2875).
(28) A stone sinker (2864).
(29) Figure 39 (2866), a drill head of quartzite, 2/5 natural size.
(30) A stone sinker (2865).
(31) A stone celt (2867).
(32) Figure 42, a bone spade (2868), 1/3 natural size.
(33) Six pottery fragments (2869).
(34) Four stone pestles (2870–2873).
(35) A bone knife for splitting the willow-herb (*Epilobium angustifolium* L.) (2874). Illustrated in figure 41.
(36) Two bone spoons (2875, 2876).
(37) Eleven stone implements: celts, arrow points and knives (2877–2887), the longer of which was an obsidian knife, length 150 mm.
(38) Figure 40 (2888), a stone for grinding paints, of quartz slate, 4/15 natural size.
(39) An obsidian celt (2890).
(40) A large stone pestle (2891).
(41) Two skulls (2917, 2918).
(42) Three stone lamps (2921–2923).
(43) A piece of a whale's lower jaw (2924).
(44) Two stone pestles (2926, 2927).
(45) A stone sinker (2928).
(46) A whetstone (2929).
(47) A stone sinker (2930).
(48) A large whetstone (2931).
(49) Figure 48 (2932), a stone hammer of volcanic tuff used in the manufacture of stone lamps and grooving stone sinkers, 1/3 natural size.
(50) A whetstone (2933).
(51) A fragment of a stone pestle (2934).
(52) Figure 49 (2935), a quartz pebble used in the game called matka, 2/3 natural size.
(53) Pottery fragments (2937).



36. Obsidian blade.
37. Scraper of black obsidian.
38. Woman's tailoring knife of slate.
39. Drill head of quartzite.
40. Stone for grinding paints of quartz.
41. Bone knife for splitting willow herb.
42. Bone spade.
43. Bone hook.
44. Bone shovel for digging.
45. Obsidian scraper.
46. Stone pestle for grinding food.
47. Obsidian blade.
48. Stone hammer of volcanic tuff.
49. Quartz pebble used in game.

All specimens found at Kavran.

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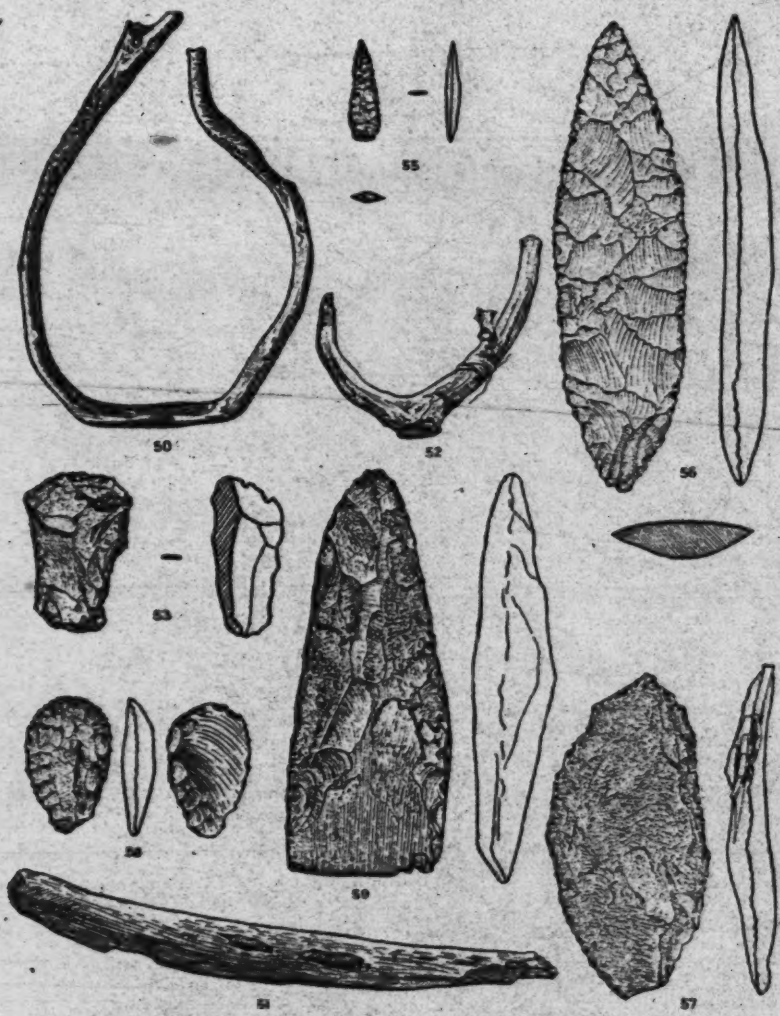

50. Bone hook for hanging fish for drying. Kavran.
51. Fragment of some bone implement, much decayed, possibly a part of a sledge runner. Kavran.
52. Bone hook of reindeer antler, probably used as a root digger. Kavran.
53. Scraper-like implement of quartzite. Kuril Lake.
55. Small arrow blade of brown reddish flint. Kuril Lake.
56. Lance blade or knife of greatly silicified slate. Kuril Lake.
57. Unfinished blade of greatly silicified slate. Kuril Lake.
58. Scraper of gray dark flint. Kuril Lake.
59. Adze of quartz schist, rudely chipped, with a polished blade from both sides. Kuril Lake.

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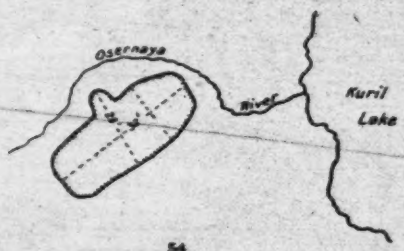
(54) Four ornamented pottery fragments (2940).
(55) Figure 51 (2941), fragment of some bone implement, much decayed, possibly a part of a sledge runner, 2/9 natural size.
(56) Figure 52 (2943), a bone hook of reindeer antler, probably used as a root digger, 1/3 natural size.
(57) Two handles of bone spoons (2944, 2945).
(58) Six fragments of bone implements (2946).
(59) Four fragments of bone implements (2947).
(60) Seven fragments of bone implements (2948).
(61) Four scrapers (2949).

We see from the number of specimens found (about 230), that the excavation of the Kavran site was particularly productive.

The ancient site on the bank of the Osernaya River is 2 miles from the point where it flows out to the sea from the Kuril Lake. There were several depressions of former dwellings, and we excavated the largest of these. The pit before digging was 2 feet deep. Then followed a layer of black earth more than a foot deep, after which the primeval soil consisting of gravel appeared. In the layer of black earth were found traces of a fireplace, two whetstones, two pottery fragments, one of



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which had a handle inside, and a Japanese coin. Remains of posts were not discovered. The pit had a rectangular form like the pits on the shores of the Nalacheva Lake. Those of the Kulki and Kavran Rivers had rather a circular form.

Higher in the rocky bank over the described pit was a small depression resembling a pit. We excavated it and found a layer of mold about a foot deep in which were only a fragment of pottery, with an ear inside, and some bones of a bear.

We came to the ancient site on the shore of the Kuril Lake on August 8 and diggings were carried on from August 9 to 14. We left the lake August 16. In order to reach Lake Kuril we had to ascend the Osernaya River, flowing out from the lake into Okhotsk Sea. The river is fifty-five miles long.

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The mouth of the river is connected with some historical episodes. During the Russian-Japanese War, in May of 1905, a fleet of Japanese schooners landed there with the intention of taking possession of Kamchatka. The Japanese were volunteers, numbering 150, under the command of the retired Captain Hundri Naridata. At that time there was no settlement at the mouth of Osernaya River. The Japanese put up a trenched camp, mounted their only cannon and hoisted a Japanese flag. Except the visit to Petropavlovsk by Admiral Togo's squadron,

000 My laborers were anxious to hunt bears, but I could not allow them to go on such an undertaking as the time was short and a Government steamer was expected on a certain date at the mouth of the Osernaya River to take my party to Petropavlovsk. However, I once allowed two of them to go for a night hunt and they secured a little bear cub. They cooked and ate the meat.

On the morning of our contemplated departure from Lake Kuril, when all the specimens found in the excavations had been packed, the lids of the boxes nailed down and the boats loaded, I was tempted to linger just a little longer upon seeing two she-bears playing with their cubs on the other side of a pond in the rear of the promontory. I accordingly delayed my departure until the afternoon, and singling out two of the best marksmen from my party, and equipped with a stereoscopic camera and a motion-picture camera, I started in the direction of the bears. We had to undress in order to cross the Etamenk River in the rear of the promontory, and to carry on our heads the bundles of clothing, the rifles and the cameras, so that they might not get wet. We reached the other bank of the river, dressed ourselves, and tried to pass as noiselessly as possible through the little jungle which led up to the open meadow where the she-bears were playing with their cubs.

We stopped on the outskirts of the forest and put up the cinema and stereoscopic cameras. As the bears were still too far away, I told one of my two men to make a circuit about them and frighten them from the rear so that they might come nearer to us. Both cameras were in readiness to take pictures, when suddenly at a distance of about thirty yards appeared a young black bear quietly passing by. I quickly took a stereoscopic snapshot and was about to start with my cinema, but the bear became frightened by the clatter of the falling shutter of the photographic camera and, instead of running away, rushed in our direction. We had no choice but to aim at his head and fire as he neared the camera.

After ascertaining that the bear was dead, we looked around. None of the other bears were to be seen; they had been frightened by the shooting and had disappeared. As I could not remain on the lake any longer, I had to give up the idea of another attempt to approach bears with peaceful intent. The bear that was killed appeared to be not more than three or four years old. I took the skin and the meat of a hind leg for the laborers.

We returned to our camp late in the day and were compelled to spend one more night on the promontory. Next morning, our archæological mission fulfilled, we started our journey to the sea.

● 172 The proceedings and results of the excavations were as follows: I selected for digging the ancient village site on a cape or rather a small peninsula in the south-
133 western part of the lake. The Kamchadal call this cape Siwusk (see map of the
136 lake). The village was located on the rocky extremity of the cape and on its slope near the small inner lake. The extremity of the cape rises over the lake about 16 meters. The sides of the inner lake which join the cape with the mainland are about six feet wide. From both sides of the cape two small mountain rivers empty into the lake.

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rivers empty into the lake. They are rich in migrating salmon, which ascend the Osernaya River from the Okhotsk Sea to the lake for spawning in dense masses and attract numerous bears roaming the country. 172

Eighteen pits were dug—15 on the rocky hill and 3 below, where our tents are to be seen on Plate 5, figure 1. The general depth of the culture layers was about 3 feet. The pits under the hill were larger and seemed to be more ancient than those on the hill. No iron objects were found, but they yielded numerous pottery fragments, with handles inside, but no ornamentation. The pits were located mostly on the eastern slope of the hill, over a steep standing rock, and the outer margins of the pits seemed to have fallen down. The angles of the pits were somewhat smoothed; originally, however, the pits seemed to be quadrangular in shape, with the sides from 24 to 30 feet long. On the top of the cape was one pit of larger dimensions, probably that of a communal house for gatherings and festivals; this pit yielded a small quantity of objects; the greatest number of artifacts were furnished by the smaller pits. The following artifacts were found in the pits of the Kuril site:

(1) Nine arrow points (2959–2967) of quartzite and flint, the longest being 141 mm. (Plate 6, A).

(2) Twenty obsidian arrow points (2968–2987) (Plate 6, B). The greatest length was 80 mm. and the smallest 18 mm.

(3) Seventeen stone knives and other implements (2988–3004). The largest implement was 72 mm. in length (Plate 7, figs. 1–17).

(4) Twelve stone scrapers (3005–3016); the largest was 93 mm. in length (Plate 7, figs. 18–29).

(5) Twelve stone scrapers and other implements (3017–3028), the greatest length being 97 mm. (Plate 8, figs. 1–12).

(6) Eleven stone implements (3029–3039), some of them not finished. The greatest length was 100 mm. (Plate 8, figs. 13–23).

(7) Fragments of stone implements (3040).

(8) Forty-nine stone scrapers (3041–3089).

(9) Thirteen bone awls (3090–3102) Plate 12, figs. 1–13).

(10) Thirteen bone arrow heads (3103–3115) (Plate 12, figs. 14–26).

(11) Eight bone ornaments and other objects (3116–3123).

(12) Five bone implements (3124–3128) (Plate 13, figs. A).

(13) Fragments of bone implements (3129).

(14) Six fragments of bone implements (3130–3135) (Plate 13, fig. B).

(15) Four stone lamps (3136–3139) (Plate 14, figs. 4–7).

(16) Three stone lamps (3140–3142) (Plate 14, figs. 1–3).

(17) Three stone lamps (3143–3145) (Plate 14, figs. 4–6).

(18) Remnants of weaving (3151–3152).

(19) Pottery fragments of different pits (3153).

(20) A pottery fragment; the whole height of a pot (3154).

(21) A stone lamp; the first stage of manufacture (3157).

(22) Figure 66. A stone lamp of andesitic lava in process of manufacture (3158), 4/9 natural size.

(23) A pottery fragment from Pallan. A gift from the Governor of Kamchatka (3159).

(24) Three stone lamps (3165–3167) (Plate 15, figs. 1–3).

(25) Five stone lamps (3160–3164) (Plate 15, figs. 4–8).

(26) Seven stone axes (3168–3174). The largest is 197 mm. long (Plate 9, figs. 1–7).

(27) Twelve stone axes (3175–3186). The greatest length is 152 mm. (Plate 9, figs. 8–19). One of these specimens is illustrated in the text-figure 59 (3183). It is a rudely chipped adze of quartz schist, with a blade polished on both sides. Length, 122 mm.; greatest width, 25 mm.

(28) Four stone sinkers (3187–3190) (Plate 10, figs. 1–4).

(29) A stone sinker (3191) (Plate 10, fig. 7).

(30) Two stone sinkers with holes (3192, 3193) (Plate 10, figs. 5, 6).

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(31) A stone pestle (3194) (Plate 10, fig. 8).
(32) Six whetstones and one sinker (3210–3216) (Plate 11, figs. 1–7).
(33) Fifteen stone implements (3195–3209): axes, arrow points, awls and sinkers (Plate 11, figs. 8–22).
(34) Text-figure 60 (3217). A scraper of silicified slate; chipped from one side only; the curved working end is trimmed; the other side of the implement is flat with a few irregular chippings. Length, 60 mm.; greatest width, 38 mm.; thickness, 14 mm.
(35) Three pieces of pumice (3218).
(36) Four whetstones (3219).
(37) Thirteen broken stone lamps (3220–3232).
(38) Two stone axes (3233, 3234). One found near Petropavlovsk.
(39) A whetstone (3235).
(40) Paint (3236).
(41) A bone screw, double threads (3237).
(42) Ten iron and 1 copper implements (3238).
(43) Two stone hammers for chipping stone implements (3239).
(44) Different fragments (3240) of stone points.
(45) Fragments of wooden vessels (3241).
(46) A skull with the lower jaw (3242).

60 Scraper of silicified slate. 61 Arrow blade of white chalcedony. 62 Scraper-like implement of silicified slate.
All specimens from Kuril Lake.

(47) Skeletal bones (3243).
(48) Two separate bones (3244).
(49) Two bone implements (3245).
(50) Pottery fragments (3246).
(51) Text-figure 61 (3247), a, b. An arrow blade of white chalcedony. General length, 67 mm.; length of the stem, 31 mm.; greatest width, 23 mm.; greatest thickness, 7 mm.
(52) Eighteen fragments of stone implements (3248–3265).
(53) Text-figure 62 (3269). A scraper-like implement of silicified slate, evidently remade from a polished adze, as shown by the polished upper part. Length, 52 mm.; greatest width, 32 mm.; height of the working edge, 18 mm.; greatest thickness, 23 mm.
(54) An obsidian arrow point (3280).
(55) Two stone scrapers (3298, 3299).
(56) Three Japanese coins of the eleventh century (3306–3308). See above, p. 37.
(57) Three fragments of ornamented bone implements (3309).
(58) A stone celt (3311).
(59) A scraper-like or some other not completed implement of quartzite. Greatest length, 45 mm.; greatest width, 48 mm.; thickness of the working end, 18 mm. Judging by the great thickness as compared with the length and width it probably may be a rejected piece, due to malformation. Text-figure 53.
(60) A small arrow blade of reddish-brown flint. Length, 31 mm.; greatest width, 10 mm.; thickness, 3 mm. (2967). Text-figure 55.
(61) A lance blade or a knife of greatly silicified slate. One side is more convex, as shown by the transverse section. Length, 141 mm.; greatest width, 41 mm.; greatest thickness, 12 mm. (2968). Text-figure 56.

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172 (62) Not finished blade, evidently intended to be subsequently elaborated into an implement of a specialized type. It might also serve as a scraper. Of greatly silicified slate. Length, 98 mm.; greatest width, 50 mm.; greatest thickness, 28 mm. (3029). Text-figure 57.

(63) A scraper of dark gray flint; one side is flat with some chippings from one edge; the other side is regularly convex with broad chippings. The working edge is rounded. Length, 41 mm.; greatest width, 26 mm.; thickness 9 mm. (3075). Text-figure 58.

(64) A stone lamp of sandstone with an ear for tying it to the sledge or canoe when traveling or hunting. 4/9 natural size (3140). Text-figure 64.

(65) A stone lamp for the dwelling, of porphyrite, 1/3 natural size (3141). Text-figure 65.

133 As stated above, we left the Kuril Lake on August 16—a quiet calm day. We crossed the lake, on the right being the rocky almost triangular Alaid Island, 823 where millions of birds were crying and rioting. The Japanese writer R. Torii refers to a Kurilian tradition, according to which in ancient times a high mountain rose where we have now the Kuril Lake. It was a handsome lady, and the neighboring summits, jealous of her, made her life unbearable by mockery and sneering, so she decided to leave Kamchatka and settled in the open sea. This became a small rocky island, Alaid (in Aino, Chachakotan), located to the northwest of the Paramushiri Island, and Kuril Lake formed in the cavity. Baron Dittmar refers to another variant of the Kamchadal tradition concerning the origin of the Kuril Lake. There was formerly a volcanic summit Alaid, which disliked its location and wandered over to the sea. In the cavity left by the mountain, the Kuril Lake originated. The mountain, however, left a piece of rock in the middle of the lake which the Kamchadal call Heart-Rock or Navel-Rock. Kuril Lake, according to Dittmar, is the second greatest lake of Kamchatka, Kronotzkoye Lake being larger.[2] Geologists explain the origin of the Kuril Lake by the sinking of an old crater. The lake now lies 200 meters above sea-level and its depth in some places reaches 300 meters.[3]

000 The trip back to the seashore took us less than a day. Our boats were speeding and leaping over the rocks of the stony bed of the Osernaya River so that we had to use poles as brakes in order not to be overturned, particularly on the dangerous curves. Hunters, who come in spring on dog sledges to the Kuril Lake to kill bears, make quite primitive boats of twig-frames covered with bear skins in order to transport skins to the mouth of the Osernaya River. These skin-boats easily glide over the rocky rapids.

As I feared, the Government steamer had left for Petropavlovsk a day before we reached the shore. It did not stop at Osernaya, passing from the western strait to Petropavlovsk through the Kuril Strait. The fall storms had begun in the Okhotsk Sea and it was dangerous for the steamer to approach the coast, which has no harbor. We might have had to remain in Osernaya for the winter if it had not been for the administrators of the saltery and cannery, who were waiting for a special steamer before closing the plants. They had already sent off on a freight steamer the imported laborers and salted and canned goods. On the next day the

[1] Torii, *Études Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science, Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921, p. 30.

[2] Carl von Dittmar, *Travels and Sojourn in Kamchatka in 1851–1855*, Part I, St. Petersburg, 1901, p. 664 (in Russian).

[3] See *The Kamchadka Expedition of F. P. Riabouchinsky*, Zoological Division, Part I; P. J. Schmidt, Moscow, 1910. *The Investigations of the Zoological Division in Kamchatka in 1909–1909*, Chapter XII, written by Dr. A. N. Derzhavin, one of Professor Schmidt's assistants.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

177 From the remnants of objects of Japanese culture no inference can be made as
325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as
554 coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal
● 172 knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

According to Steller (p. 320), the Kamchadal paid homage to pieces of iron obtained from the Kurilians. The iron was set up on a pole in front of the dwelling as proof of the wealth and special importance of its owner. Krasheninnikoff also states (II, p. 97) that every Kamchadal possessing a fragment of iron was deemed rich and lucky.

177 The Kamchadal, now Russianized, no longer live in subterranean houses,
342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
823 We may only surmise the reasons for such a diversity. We know that many of

CHAPTER VII

STONE LAMPS

171 I discovered 36 stone lamps in excavations in Kamchatka. Some of them
354 were broken. All the types of ancient Kamchadal stone lamps are shown in Plates 14 and 15 and text-figures 64 to 66. They are not remarkable for great diversity as to size and form. I mentioned Aleut lamps[1] longer than 310 mm.,
● 172 and one lamp 1 meter long. There is in the U. S. National Museum at Washington an unusually large stone lamp (No. 90476) from Kodiak Island which weighs 67½ pounds.[2] An Eskimo stone lamp 43 inches long (i. e., somewhat

64. Stone lamp of sandstone.
65. Stone lamp of porphyrite.
66. Stone lamp of andesitic lava, in process of manufacture.
All of Karil Lake.

longer than a meter), weighing about 50 pounds is in the American Museum of Natural History of New York. Dr. Stefanson saw several larger lamps, but was unable to purchase them from their owners.[3]

354 The Kamchadal stone lamps show the following shapes: circular, elliptical,
172 egg-like and sad-iron in outline. No lamps of rectangular form, like those of the Aleut, and clam-shell shaped or crescentic in outline, like those of the Eskimo of Cumberland Gulf or Point Barrow, were excavated in Kamchatka.

354 Lamp No. 3158 shows the cavity rudely picked out with a hammerstone in
the process of manufacture. All the other illustrations of lamps show them in a
324 finished shape and polished. The straight rims of some lamps were chiseled out
with hard quartz chisels (see No. 2183). Most of the lamps are flat-bottomed, so
172 they stand without support. The lamp was put on a wooden stand in a somewhat

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 74.
[2] Walter Hough, *The Lamp of the Eskimo*, Annual Report, U. S. National Museum for the year 1897, Washington, 1898, pp. 1027–1037.
[3] See Vilhjalmur Stefansson, *My Life with the Eskimo*, New York, 1913, p. 249.

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Tyushov's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. XXXVII, No. 2, St. Petersburg, 1908, in Russian, figures 28 (p. 341) and 29 (p. 342).

000 that they had been lamps, and not cooking pots; but this opinion may be offset by the shape, size and, especially, the depth of the pots found.[1]

303 Witsen, based on information received from cossacks, stated that the Kamchadal used clay vessels.[2] The Cossack Atlassov,[3] mentioned above, says in his
415 report to the Government that the Kamchadal made pottery in his time.[4]

We see that before our excavations there were some indications as to the former pottery-making of the Kamchadal, but these were somewhat vague. Our diggings furnished more definite data concerning the Kamchadal types and methods of manufacturing pottery. We discovered two kinds of coarse clay vessels—with handles inside and with holes near the upper rim of the pots—and a kind of more elaborate ceramics with outer ornamental designs.

POTS OR PANS WITH EARS INSIDE

323 Fragments of pottery with handles inside were found by the writer in many
172 diggings of the central and southern parts of Kamchatka, and he was fortunate to discover one complete pot in a pit on the shores of the Nalacheva Lake and another on the Nalacheva Cape (see Plate 17, figs. 1, 3). We may say that not only the wheel was unknown to the Kamchadal manufacturer of this rude kind of pottery, but neither the coil method nor the basket modeling process was applied by him, though there remained some impressions of basketry on the outer side. It seems that the vessels were worked out from single blocks of clay and beaten into shape. It is the crudest pottery. The dimensions of figure 1 have been given before (see p. 48). The thickness is about a third of an inch. It is difficult to say whether this kind of pottery was especially burnt before being used or was baked by the fire while cooking. The fact that these vessels remained intact after having been long buried under the ground proves that they were solidly made and water-tight. Being smeared with fat and blackened by smoke, they received a coating against water, which may be compared with the glaze of higher types of pottery. To make the clay more resistent it was tempered with sand, gravel and the hair of sables' tails.[5] The Cossack Atlassov, when presenting to the Government the tribute of the Kamchadal in sable-skins, delivered many of them without tails. In apologizing he said that the Kamchadal make boas of sables' tails and used the hair for tempering clay.

415 There is no doubt that the inside ears were intended for suspending the pot
172 over the fire, as they afforded better protection to the suspending cord or thong than those outside the pan.

[1] Carl von Dittmar, *Reisen und Aufenthalt in Kamchatka in den Jahren 1827–1833*, St. Petersburg, Part I, p. 213. Dittmar gives the following measurements of a pot: upper diameter, 12 cm.; lower diameter, 10 cm.; maximum width, 14 cm.; depth, 10 cm. This vessel, therefore, had an aperture smaller in diameter than the middle part, and its bottom was still smaller than the aperture. Clay lamps are of a quite different shape, as shown by Bogoras, Nelson and other explorers of the northern regions.

[2] Nicolaas Witsen, *Noord en Oost Tartarye*, Amsterdam, vols. I–II, 2d ed., 1705, p. 673 (1st ed., 1692).

[3] See before p. 1.

[4] See G. Spassky, *Vladimir Atlassov the Conqueror of Kamchatka*, Jour. Imperial Russian Geographical Society, 1858, vol. XXIV, p. 184 (in Russian).

[5] Munro (*Prehistoric Japan*, p. 196) supposes that grass was mixed by the Kurilians in their primitive pottery, the clay of which became black, due to the carbonization of the grass. R. Torii (*Les Ainos des Iles Kouriles*, p. 188), referring to information received from old Kurilian people, says that the ancient Kurilian Ainos tempered clay for pottery with sand and minced grass called "nokkanki."

1. The end of the 17th Century -- Anal 145

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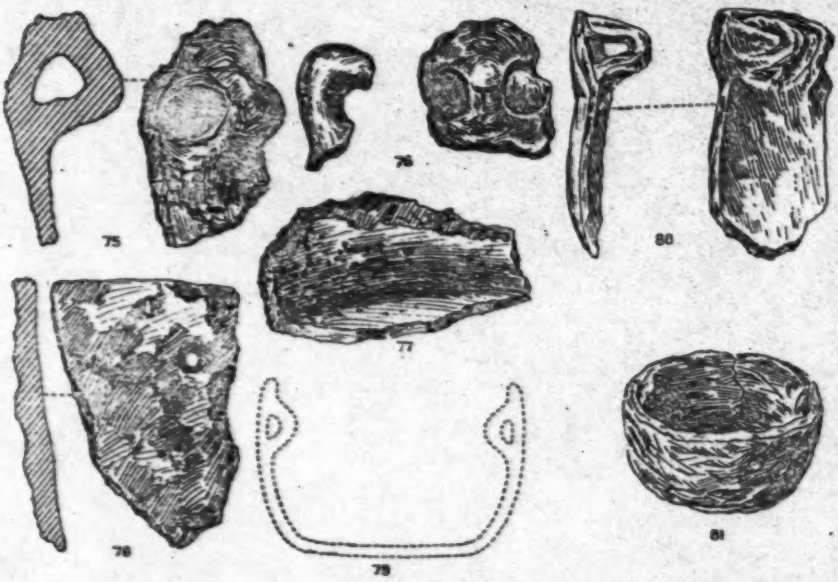
We have referred to Mr. Torii who found that the Kurilian Ainos used this kind of pottery. Mr. Mamiya Rinzo displayed a clay pan with handles inside from Yezo.[1] Mr. S. Suzuki has also shown a clay pan of rough make with the handles inside from Sakhalin Island.

The question arises as to where we may look for the place of origin of this kind of pottery: in Kamchatka or Japan. Pottery in general needs a sedentary life for its proper development. The same may be said of the primitive pottery



Fragments of ancient Kurilian pottery.

in question. It could develop among the original settlers of Japan, the Ainos, and spread to the north, to Sakhalin, Kurilian Islands and Kamchatka. The sedentary or semi-sedentary fishers of Kamchatka might have adopted it from the Kurilians.

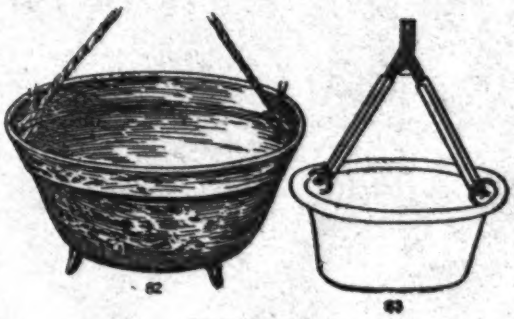
According to Mr. N. Tanaka, "within the last 20 years earthenware pans with handles inside were in use in Musashi and the island of Hachijo."[2]

Illustrations of the following fragments of ancient Kurilian pottery are taken from R. Torii's work (*Les Ainou des Iles Kouriles*, Plate XXXIII). Figures 75 and 76 show fragments of Kurilian pottery with inside ears. Figure 77 shows a

[1] The Japanese investigator Mamiya Rinzo spent the years 1804–1817 in Sakhalin.
[2] See Munro, *Prehistoric Japan*, Yokohama, 1911, p. 194. Cited from Tokyo Jinruigaku (Tokyo Anthropological Magazine), No. 16, 1887.

171 fragment of the lower part and the flat bottom of a clay vessel. Figure 78 represents a fragment of a clay vessel with a drilled hole for tying it by a cord to the hole
415 of another broken piece of the vessel. In figure 79, Torii gives an outline of a clay pan with two ears inside. It is not clear whether there was a third ear, like that
● 172 in the Kamchadal clay pots.

Figure 80 shows a fragment of ancient Aino pottery with an ear inside, found, according to Torii, in Sapporo on Yeso. It is shown one-third natural size. Figure 81 represents a clay vessel of ancient pottery with ears inside found in Esashi, Yeso; two-ninths natural size. This drawing is taken from an article by the late Professor S. Tsuboi in the Bulletin of the Tokyo Anthropological Society (vol. IV, No. 37, March 1889, p. 227). This vessel has only two inside ears. A rough sketch of a Sakhalin clay pot with ears inside is shown by Mr. Suzuki in his work, *Karafuto Nikki*.[1] Like figure 81 this vessel also has only two ears.



82 83

Iron cooking vessels.

According to Torii (*Les Ainou des Iles Kouriles*, p. 279) fragments of pottery with ears inside the pots were found also in Japan, i. e., on the Nippon Island. Thus we see that the manufacture of this kind of primitive pottery was not limited to the Kurilian Islands and Sakhalin only. It spread all over Japan—over localities formerly inhabited by Ainos. But from nowhere, except in Kamchatka, were clay vessels with three inside handles reported.

Figure 82 shows a sketch of an iron pan from Sakhalin with ears inside the vessel. The illustration was published by Torii (*Les Ainou des Iles Kouriles*, p. 195). Figure 83 shows a drawing of an iron pot with loops on the inside surface. It is from a photograph of a piece in the Museum of the Imperial University in Tokyo, kindly forwarded to me by Professor Akira Matsumura. The cord is covered with birch bark in order to protect it from the heat of the boiling pot. It must be noted that the iron pots (figs. 82–83) have only two inside ears like the

[1] Suzuki traveled in Karafuto (Sakhalin) Island in 1863. See *Karafuto Nikki*, Shigehiro Suzuki, With Notes and Addenda by Takashiro Matsumura, 2 vols., Tokyo, 1880.

171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found
415 in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments
172 of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 Fragments of a different kind of clay pots were found by the author in the
323 excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these
171 fragments seems to be from small vessels, the clay to be burnt, and the pots more
172 decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot has a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 82 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Tsuboi, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rims.

[4] See the author's work, *The Koryak*, p. 640, fig. 188.

171 common with that of the thick and clumsy clay lamps and unbaked quadrangular
415 kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in
323 the Koryak excavations were black from soot and fat, and were evidently well
baked, as they remained strong and hard, although they had been lying in the wet
172 soil. All these potsherds were made of coarse clay containing fine gravel and pieces of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen before (p. 50) that neolithic sites in the Baikal Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the author in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Aleuts is shown in figure 77.

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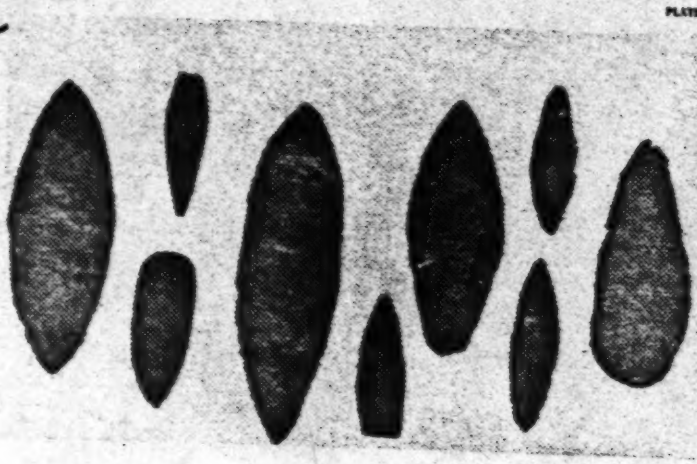

A

B

A. (2956–2967). Lance and arrow heads of quartzite. About one-half natural size; the length of the largest head is 141 mm.

B. (2956–2967). Lance and arrow heads of obsidian. About three-fifths natural size; length of the largest head is 80 mm. and that of the smallest 15 mm.

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JOCHELSON PLATE 7

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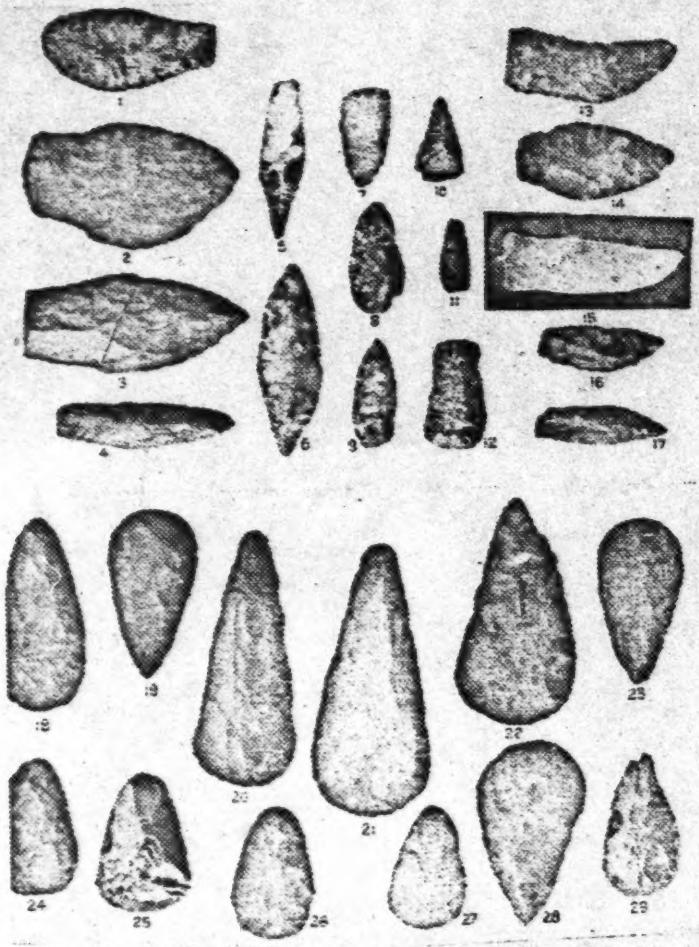

1 (2988). Man's knife of andesite, with wooden handle.
2 (2989). Man's knife of quartzite, with wooden handle.
3 (2990). Lance head of silicified slate.
4 (2991). Arrow head of quartzite.
5 (2992). Drill point of hornstone schist, with wooden or bone handle. Used for drilling wood, bone and also sinkers of volcanic tuff.
6 (2993). Arrow point of quartzite.
7 (2994). Arrow point with straight base, of silicified slate.
8 (2995) and 9 (2996). Arrow point with rounded base, of silicified slate.
10 (2997). Drill point of hornstone schist.
11 (2998). Small arrow point of quartzite, not finished.
12 (2999). Small adze of quartzite.
13 (3000). Curved carving knife of andesite, with handle.
14 (3001). Arrow point of quartzite.
15 (3002). Curved carving knife of light-green quartz schist.
16 (3003). Small carving knife of silicified slate.
17 (3004). Small arrow point of quartzite, unfinished.
18–24 (3005–3011) and 26–28 (3013–3015). Scrapers of quartzite.
25 (3012) and 29 (3016). Scrapers of andesitic obsidian.

All obtained in excavations on Kuril Lake. About three-fifths natural size; largest specimen 93 mm. long.

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JOCHELSON PLATE 8

1 (3017). Andesite knife for carving wood, with projection for securing it to wooden or bone handle.
2 (3018). Andesite point of a lance.
3 (3019). Skin scraper of quartz schist.
4 (3020). Skin scraper of quartz schist.
5 (3021). Fragment of an andesite point.
6 (3022). Spear point of quartz slate, unfinished.
7 (3023). Andesite point of a lance.
8 (3024), 9 (3025), 10 (3026). Andesite point of an arrow.
11 (3027). Andesite blade of a lance.
12 (3028). Same as figure 8.
13 (3029), 14 (3030). Andesite blade of a lance.
15 (3031). Skin scraper of silicified slate.
16 (3032). Andesite blade of a lance.
17 (3033), 18 (3034). Andesite blade for an arrow.
19 (3035). Flint blade for a lance.
20 (3036). Arrow point of quartz schist.
21 (3037). Fragment of a quartz schist point.
22 (3038). Flint blade for a lance, unfinished.
23 (3039). Andesite blade for a lance.

All specimens from Kuril Lake.

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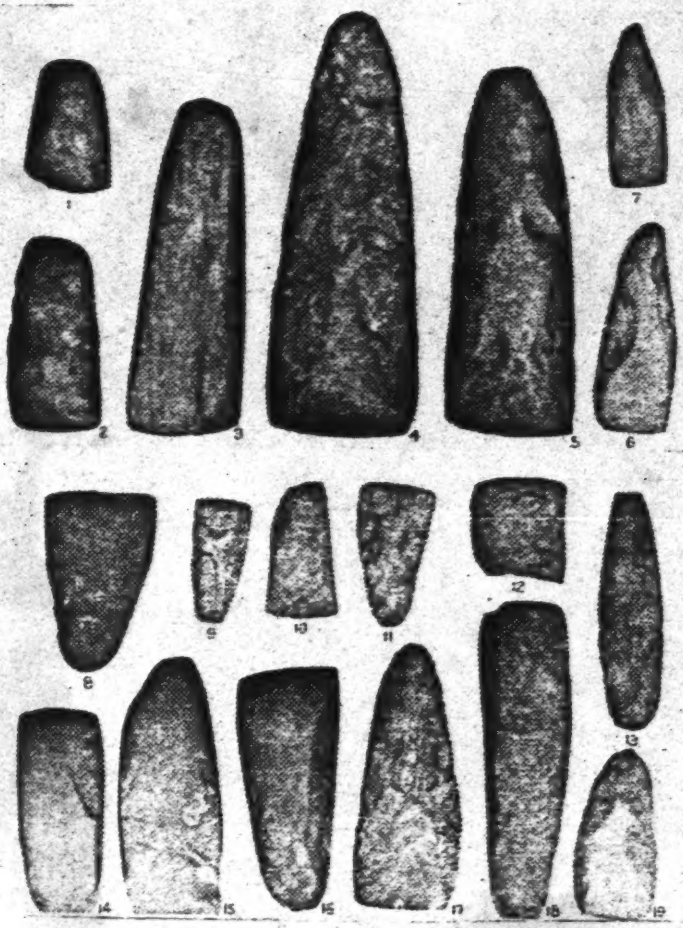

1 (3168). Adze of green quartz schist, polished. From Kuril Lake.
2 (3169). Adze of green quartz schist, blade polished. From Kuril Lake.
3 (3170). Ax of jasper, wholly polished. From Kuril Lake.
4 (3171). Ax of chalcedony (agate), partly polished. From Kuril Lake.
5 (3172). Ax of quartz schist, polished. From Kuril Lake.
6 (3173), 7 (3174). Adze of green quartz schist, polished. From Kuril Lake.
8 (3175). Adze of hornstone schist, not perfectly polished. From Kavran.
9 (3176). Adze of quartz schist. From Kavran.
10 (3177). Adze of jasper, polished. From Kavran.
11 (3178). Adze of quartz schist, polished. From Kavran.
12 (3179). Fragment of an adze of quartz schist. From Kavran.
13 (3180). Chisel of jasper, partly polished. From Kavran.
14 (3181). Adze of agate, polished. From Kavran.
15 (3182). Adze of jasper, polished. From Kavran.
16 (3183). Adze of agate, polished. From Kavran.
17 (3184). Adze of quartz schist, partly polished. From Kavran.
18 (3185). Chisel of jasper, polished. From Kavran.
19 (3186). Adze of green quartz schist. From Kavran.

The largest specimen of this plate, figure 4, is 197 mm. long.

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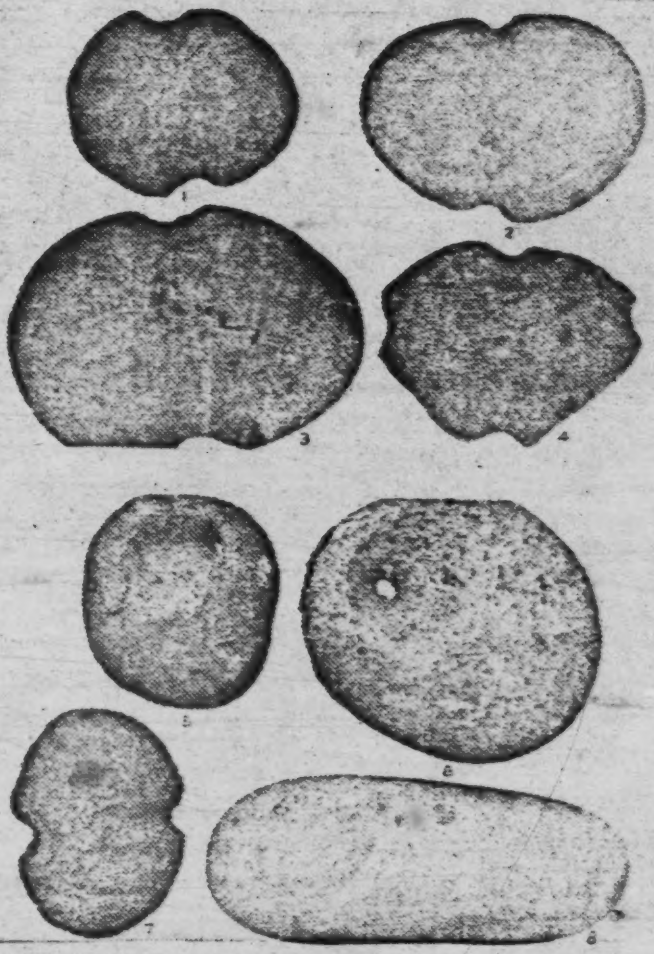
JOCHELSON PLATE 12



1 (3187). Fish-hook sinker of volcanic andesitic tuff from the mouth of Kavran River.
2 (3188), 3 (3189). Fish-hook sinker of quartz diorite from the mouth of Kavran River.
4 (3190). Fish-hook sinker of diabase porphyrite from the mouth of Kavran River.
5 (3191), 6 (3192). Fish-hook sinker of volcanic andesitic tuff with a drilled hole, from mouth of Kavran River.
7 (3193). Fish-hook sinker of volcanic andesitic tuff grooved all around, from Kuril Lake.
8 (3194). A stone pestle of quartzite for grinding food, from Kuril Lake.

(P.99)

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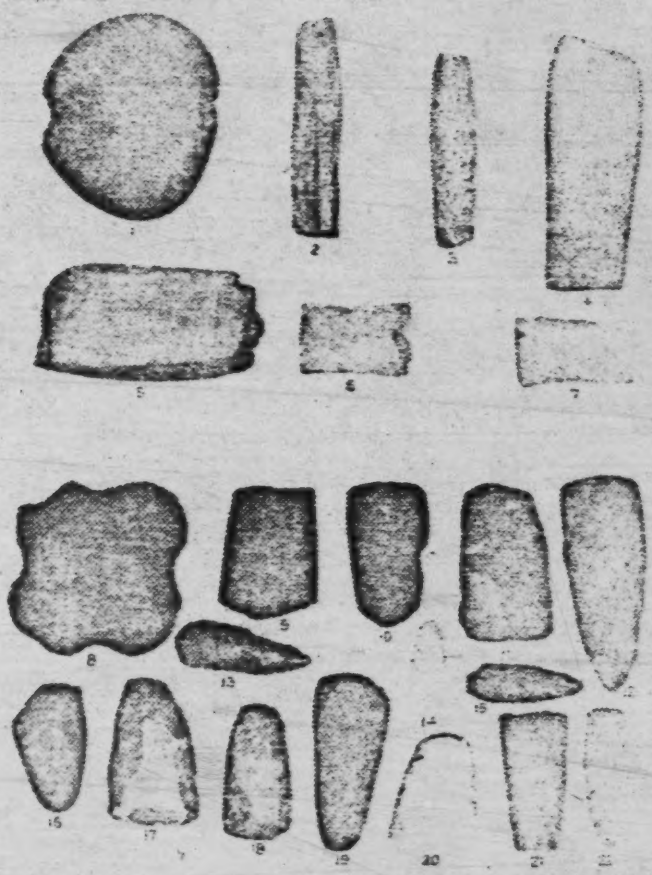

1 (3210). Fish-hook sinker of quartz diorite.
2 (3211). Whetstone of porphyrite for sharpening bone needles.
3 (3212). Whetstone of slate for polishing bone implements.
4 (3213). Whetstone of porphyrite for polishing stone implements.
5 (3214). Whetstone of tachylite tuff.
6 (3215), 7 (3216). Whetstone of slate.
8 (3195). Fish-hook sinker of diabase porphyrite.
9 (3196), 10 (3197). Fragment of an adze of dark-green quartz schist.
11 (3198). Adze of green quartz schist, unfinished.
12 (3199). Adze of jasper, partly polished.
13 (3200). Drill point of hornstone schist.
14 (3201). Small chisel of light-green quartz schist.
15 (3202). Small arrow point of andesite obsidian.
16 (3203). Fragment of an adze of green quartz schist.
17 (3204), 18 (3205). Adze of green quartz schist, partly polished.
19 (3206). Adze of dark reddish jasper, polished.
20 (3207). Adze of light-green quartz schist.
21 (3208). Fragment of an adze of dark-green quartz schist.
22 (3209). Chisel of quartz schist, only the edge is polished.

All the specimens of this plate were obtained in excavations on the shores of the Kuril Lake. Two-fifths natural size, the largest specimen is 132 mm. long.

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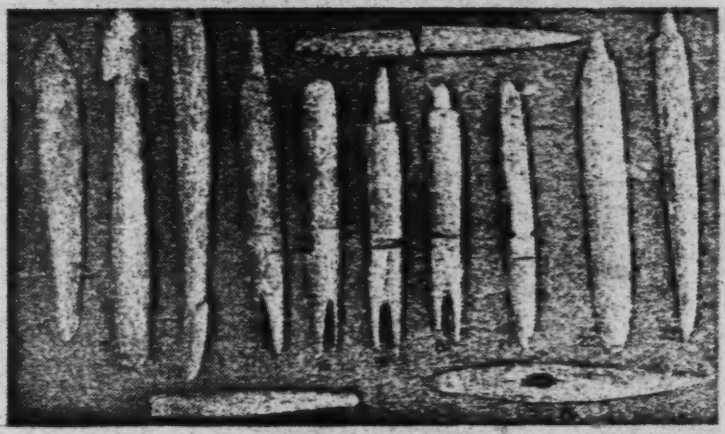

1 to 7 (3090–3096). Bone awls for splitting sinews of reindeer and sea-mammals into threads for sewing. Made of the bones of bird wings, mostly wild geese and swans.

8 to 10 (3097–3099). Bone awls of birds' leghones, used when sewing skins.

11, 12 (3100–3101). Bone awls made of birds' shoulder blades.

13 (3102). Awl made of wing bone of a swan. Both ends may be used when sharpened.

14 to 16 (3103–3105). Bone heads of bow arrows, partly decayed.

17 to 23 (3106–3112). Bone foreshafts of bow arrows. The stem of the foreshaft entered into a socket of the wooden shaft. A sinew cord was lashed around this joint. The upper end of the foreshaft is bifurcated to receive a stone blade. The stem of the blade was glued to the bifurcation and fastened by a sinew thread, lashed around the foreshaft, on which notches are to be seen for attaching the lashing thread. The bone foreshafts are partly decayed.

24 (3113), 25 (3114). Broken bone point which could be used as a head of an arrow of a bow or as a central prong of a dart for water birds. Figure 24 is in a decayed state.

26 (3115). Represents a head of a harpoon.

All specimens were obtained in excavations on the shores of the Kuril Lake. Three-fifths natural size.

[A 101]

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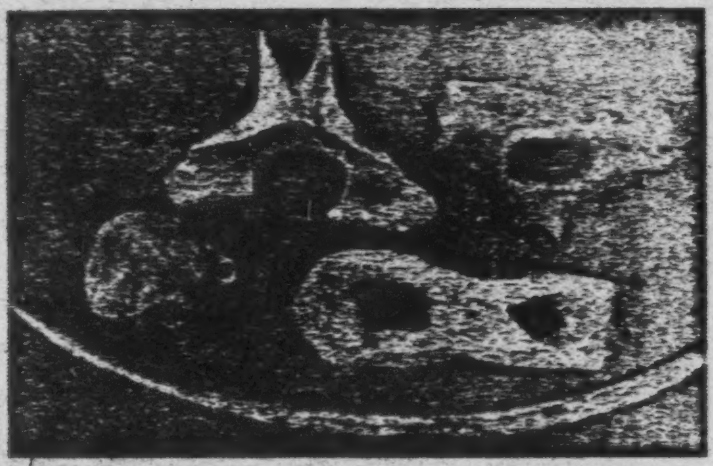

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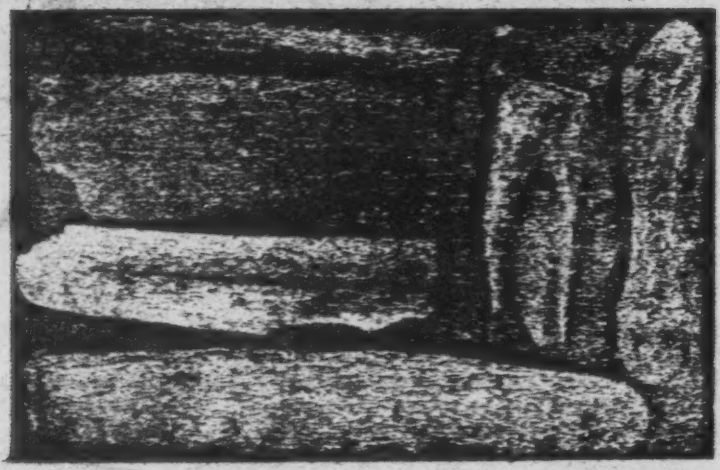

B

A. 1 (3120). Bone sealing-spike for sealing boats.
2 (3128). Needle implement with broken-off ends.
3 (3129). Bone ball with an ear for hanging, possibly as a decoration to women's dress.
4 (3127). Bone implement for unknown purpose. It may have been used as a clasp-dresser, or to attach dogs to a post.
5 (3130). Bone root-digger.
B. (3130-3139). Fragments of decayed bone implements.

All bone implements of this plate were discovered in pits of old dwellings on the shore of Hurd Lake. Three-fifths natural size.

[P. 102]

JOCHELSON PLATE 34

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1 (2211). Small lump of quartz slate. Nalocheva Lake.
2 (3232). Cemented fragments of lump of diorite. Kuril Lake.
3 (3136). Lump of quartz slate. From Kuril Lake.
4 (3137). Lump of quartzite. From Kuril Lake.
5 (3138). Lump of sandstone. From Kuril Lake.
6 (3139). Lump of quartz schist. From Kuril Lake.
7 (2921). Lump of quartz schist. From Kavran site.
8 (2922). Lump of quartzite. From Kavran.
9 (2923). Lump of quartz slate. From Kavran.
10 (3143). Lump of quartz slate. From Kuril Lake.
11 (3144). Lump of quartzite. From Kuril Lake.
12 (3145). Lump of quartz schist. From Kuril Lake.

Figures 1, 2 half natural size, figures 3 to 12 two-fifths natural size.

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1 (3160). Lamp of andesitic lava.
2 (3161). Lamp of quartz schist.
3 (3162). Lamp of andesitic lava.
4 (3163). Lamp of quartz schist.
5 (3164). Lamp of quartzite.
6 (3165). Lamp of andesitic lava.
7 (3166). Lamp of quartz schist.
8 (3167). Lamp of quartzite.

All specimens from Kuril Lake. About two-fifths natural size.

[P. 104]

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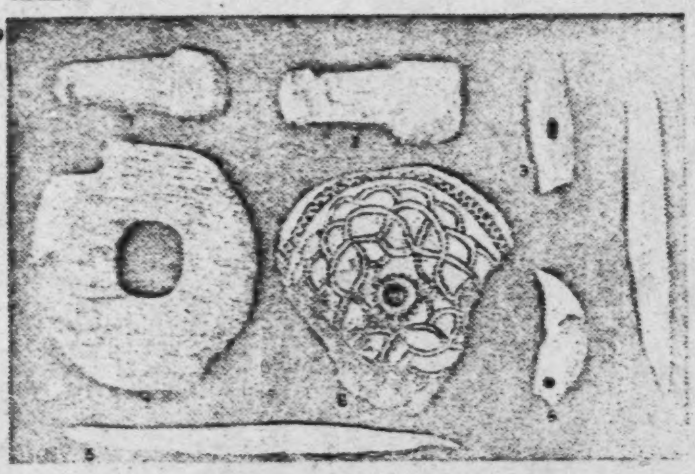

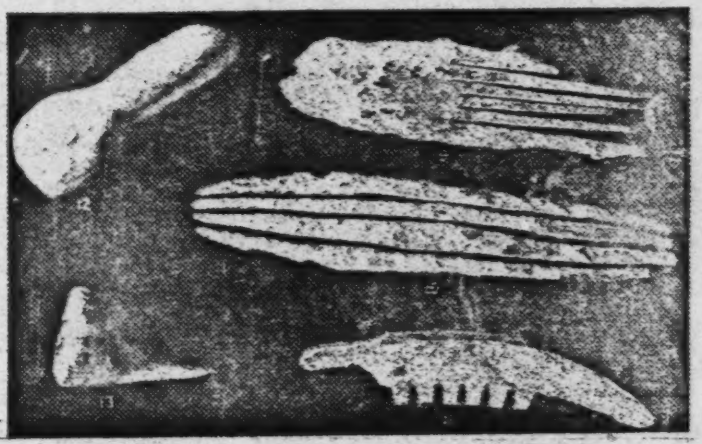

1, 2. Unknown bone implements. May be stamps to decorate clay pots when the clay is still wet.
3. Fragment of harpoon bone head.
4 and 5. Seem to be decayed bone prongs of a bird dart.
6. A perforated seal's tooth, worn as ornament.
7. Bone belt-buckle without decoration.
8. Bone belt-buckle ornamented with engraved zigzags, interwoven curves and circles.
9. Half decayed bone comb.
10. Comb-like bone implement, as it seems to the author, for impressing parallel lines under the rim of clay pots.
11. Bone implement for stamping clay pots, as shown on potsherds on Plates 17 and 18.
12. Bone implement for making fillets under the rim.
13. Bone implement for ornamenting clay pots by puncturing.

[P. 105]

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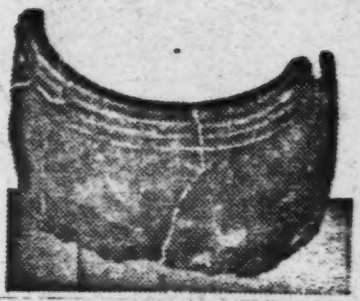

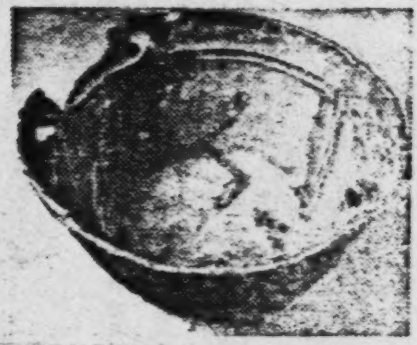

1. Clay pot with ears inside; discovered by the author in a pit of an old Kamchadal dwelling on the shore of Nalachevá Lake. The pot was split in two pieces, but complete, and later cemented by the author. The splitting may be regarded as a result of freezing and thawing of the soil. It was discovered at the depth of 3 feet 4 inches. Digging was done with great care. When a piece of the rim appeared, the spade was discarded and the earth from and around the pot was taken out by the hands. For the dimensions of the pot see p. 8b.
2. Similar clay pot of smaller size, discovered in a pit on the Nalachevá Cape.
3. Portion of upper part of a clay pot without handles inside. It consists of three fragments cemented together by the author. No other pieces of the same pot were discovered and we do not know whether its bottom was flat or rounded. Outer parallel lines made by a comb-like implement are similar to inner parallel lines of pots with handles inside.

[A 106]

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Fragments of clay pots, some with ears inside. From Naischeva Cape, Naischeva Lake, and shores of Kuril. Some of these fragments have no parallel lines inside.

[A 102]

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A (2704). 18 fragments of pottery discovered in the site of Kulki River.
B (2669–2673). 12 fragments of pottery found in excavations of the banks of Kavran River and a fragment some bone implement.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

22: Guillemard T-2 (1882) 1886 Kamchadal

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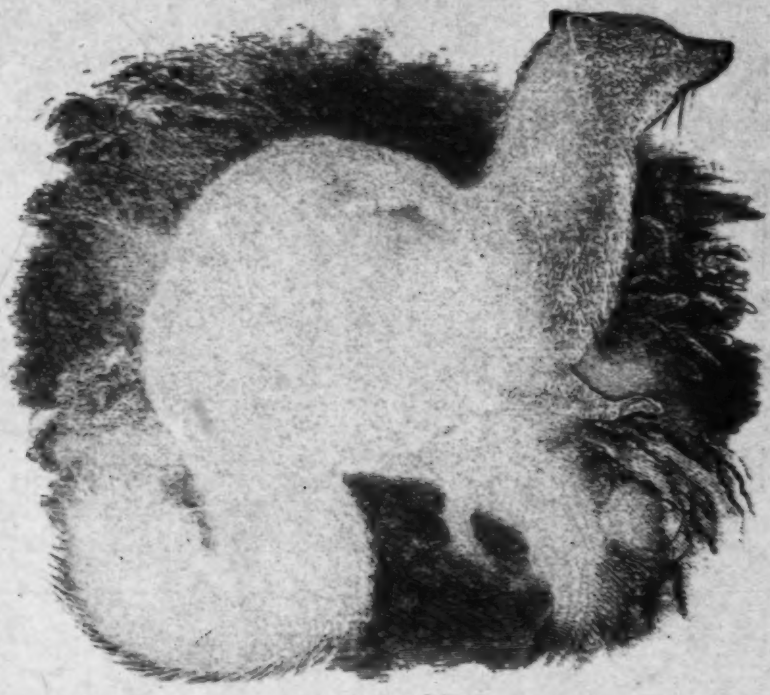
number killed by the party was close on one hundred and twenty skins. The Kronotsky Lake, which has never yet been visited by Europeans, lies south of the great group of volcanoes at the mouth of the Kamschatka River, and some sixty miles east of Melcova.[1] It is now completely deserted by the natives, but, as far as we



SABLE.

could gather from our hunters, it has remains of ancient lake-dwellings on its shores, with deposits of shells and other objects of like nature resembling the *kjokken-möddings* of Northern Europe which, as far as I am aware, are unknown in the country at the present day.

Of the number of sables killed annually in Kamschatka it is

[1] Both Melcova and the lake are wrongly placed on the Admiralty chart; the former is nearly ninety miles north of its assigned position!

G /449 cont./ Mamia Rinsô (4),
323 to be sure, reports about the Ainu of southern Sakhalin that they
171 make earthenware vessels, and, to be sure, of two kinds, the
A one of about six to seven inches in diameter with ears on two
323 sides, tojes'ju, i.e., earthen pans, the other called kamui'sju,
[177] i.e., divine pans, but one cannot fail to recognize the recent
Japanese origin of this art. In the seventeenth century, when
A Vries and his companions discovered Jesso and the nearby Kurile
[175] Islands, they saw the inhabitants of them eating from lacquered
[172] wooden bowls /450/ and quadrangular troughs (1), and just such
[415]

A [113] 1. Siebold, Aardr. en volkenkund. toelicht. tot de ontdekk. van Vries /Geographical and Ethnographical Explanations from the Discoveries by Vries/, P. 108.

bowls, but no earthenware vessels, are among the articles that Poljakof found, besides skulls and bones, in old Ainu graves on Sakhalin and presented to our museum. Concerning the ancient
G Kamchadal, one finds, to be sure, in the report of the Cossack
321 Atlassof published by Witsen (2), the information that they
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[113]

2. Noord en Oost Tartarye, ed. of 1705, p. 673.

manufacture for their own use earthenware and wooden vessels, but the former are more than questionable. Steller and
K Krascheninnikof saw only wooden vessels among them, and
[172] Ditmar (3), while digging on the sites where their yurts had once

K [113] 3. "Reisen und Aufenthalt in Kamschatka in den Jahren 1851-1855 /Travels and Residence in Kamchatka in 1851-1855/" (Beitr. zur Kenntn. des Russ. Reiches, third series, Vol. VII, p. 246).

stood, only once found, among numerous stone tools, a small piece of earthenware, which crumbled in his hands because it had not been fired, or at most only slightly, and which he thought was a train-oil lamp shaped by hand.

4. Op. Cit., P. 184.

172 wooden shaft. Length, 110 mm.; greatest width, 47 mm.; smallest width, 10 mm.; thickness of the narrow end, 9 mm.; of the broad end, 8 mm. Fig. 22, b, shows the side view.

(4) A long stone arrow point (2723).
(5) A stone ax (2724).
(6) Three stone arrow points, not finished (2725–2727).
(7) Stone pestles (see site Kavran, 2729–2733).

173 On the right bank of the Kavran River, in 6 minutes' walk from its mouth, a site surrounded by a wall of earth was dug out. Within the wall there were three almost circular pits as shown in figure 23. According to a tradition this was the fortified place of Kulki, a strong man of Koryak origin, who used to cross the central mountain ridge of the peninsula in order to fight the chiefs of the Kamchatka valley. The digging of the site was carried to the depth of 2,247 mm., the frozen soil reaching to the depth of 2,095 mm. The shaft dug represented the following layers: 172

1027 mm.	a layer of turf (A).
1287	clay containing (B) organic remains.
1522	charcoal, implements, organic remains and clay (C).
1797	clay containing very little organic remains (D).
2167	yellow clay (E).
2247	shingle (F).

The excavation of the site was continued from June 22 to July 10 inclusive. As the soil was still frozen it had to be thawed by burning wood, layer after layer. This, however, did not prevent the breaking by the spade of some of the artifacts while digging. Almost all of the artifacts were found in layer C, and very few of them in layers B and D. The fact that artifacts were discovered only at a certain depth bears witness of the antiquity of the site. The following objects were found:

(1) 24 stone arrow points; the largest is 100 mm. long and the smallest 21 mm. (2665–2688). Of these the following are illustrated: figure 30 (2666), a–c, a laurel leaf-like blade of black flint with some defective trimming. Length, 99 mm.; greatest width, 32 mm.; greatest thickness, 12 mm. Figure 36 (2667), a–b, an obsidian blade of a laurel leaf-like shape, nicely trimmed. Length, 48 mm.; greatest width, 17 mm.; thickness, 10 mm. Figure 29 (2668), a–c, an arrow point of black flint, with small facets and symmetrical sides finely trimmed. Length, 60 mm.; greatest width, 16 mm.; greatest thickness, 8 mm. Figure 35 (2685), a small arrow blade of black flint. Length, 21 mm.; greatest width, 10 mm.; greatest thickness, 4 mm.

(2) Fragments of pottery (2689, 2720, 2721).
(3) A stone ax of quartz limestone (2728).
(4) A lance point of tawny gray flint, rudely chipped, evidently not finished. Length, 222 mm.; greatest width, 44 mm.; greatest thickness, 40 mm. See figure 33 (2723).
(5) Five stone pestles (2729–2733) of the sites Kulki and Kavran, used for grinding food of edible plants and roots mixed with meat, fat or animal oil. The largest found in Kavran was 228 mm. long and is illustrated in figure 28 (2733) a–b. Made of quartz slate.
(6) Three fragments of Japanese porcelain cups (2746).
(7) Two pieces of iron (2745).
(8) Shells of mollusks (2747).
(9) 35 fragments of bone arrow heads (2747a).
(10) The bone part of a root digger (2748), in Kamchadal qazqar.
(11) The same as No. 10 (2749).
(12) A bone arch which served as stanchions of an ancient Kamchadal dog sledge, in Kamchadal mean. Illustrated in figure 31 (2750), 4/15 of natural size.
(13) Two bone hooks (2751, 2752). The first hook is illustrated in figure 43, 1/3 natural size; the second in figure 50.
(14) Fragments of bone implements (2753–2756).

The *Kamtſchadales*, beſides the general name *Itelmen*, diſtin- 101
guiſh themſelves by adding the name of the river, or remarkable place where they live, as *Kikſha-ai*, an inhabitant upon the Great River; *Suatchu-ai*, an inhabitant upon the river *Awatſcha*; for the word *ai* being added to any river or remarkable ſituation, denotes inhabitant of that place, as the word *Itelmen* is the general name for inhabitant. Thoſe who think *Konchata* to have been a great captain, ſeem to have applied to him only all the brave actions which ought to be attributed to the ſeveral inhabitants upon the river *Elouki*, who are called *Koatche-ai*, or, in the common way of ſpeaking, *Kontchat*: beſides, this being a received opinion, that the inhabitants of the river *Elouki* are the braveſt of all the *Kamtſchadales*, the *Koreki*, who are their neighbours, might eaſily call the whole nation *Kamtſchadales* from their name *Koatche-ai*; and it is nothing extraordinary to find the word *Koatche-ai* changed into *Kontchala*, and *Kontchala* into *Kamtſchadale*, as we find ſeveral ſimilar examples, not only among theſe barbarous people, but the politeſt nations of *Europe*.

With regard to the place where the *Kamtſchadales* came 174
from, or at what time they firſt ſettled here, we can have no certain account; for all that can be obtained from theſe people is only fabulous tradition; and they pretend that they were created upon this very ſpot, and ſay, their firſt anceſtor was *Kutbu*, who formerly lived in the heavens: however by their manners, cuſtoms, language, dreſs, and other circumſtances, it would appear that the *Kamtſchadales* came over from *Mungalia*. Of the antiquity of theſe people *Steller* gives the following proofs: 1*ſt*. that they have loſt every tradition of their origin. 2*d*. That before the arrival the *Ruſſians*, they knew little of any other people, except the *Koreki* and *Tchukotſkoi*; and it is but lately that they came to any knowledge of the *Kuriles* and *Japaneſe*, and this was owing to the arrival of the latter

among

174 among them to trade, from a *Japanese* boat having been caſt away upon their coaſt. 3*d*. That theſe people are extremely numerous notwithſtanding ſo many are deſtroyed every year by wild beaſts, *&c*. 4*th*. From their great knowledge of the virtues and uſes of the natural produce of the country, which cannot be attained in a ſhort time, not to mention that they have no more than four months in the year left for this enquiry, and great part of thoſe too they muſt employ in fiſhing and making proviſions for winter. 5*th*. All their inſtruments and houſhold furniture are different from thoſe of other nations, and their neceſſities ſeem to have directed the invention of moſt of them. 6*th*. That their uncultivated ſtate of nature and paſſions ſeem to differ very little from that of the brute beaſts, pleaſures being their only purſuit, having no idea of futurity.

The following reaſons incline us to think that they take their origin from the *Mungals*, not from the *Tartars* who live upon the river *Amur*, nor from the *Kuriles* or *Japaneſe*; for if they had ſprung from the *Tartars* it is probable they would have ſettled about the river *Lena*, where the *Jakutſki* and *Tunguſi* live at preſent, theſe places being formerly uninhabited, and much more fruitful than *Kamtſchatka*; nor can we imagine that they were driven thence by the *Jakutſki*; the difference of their manners, and make of their bodies from the *Kuriles* is ſuch that we cannot believe they ſprung from them; and that their origin ſhould be *Japaneſe* appears improbable, becauſe their ſettlement muſt have been prior to the ſeparation of the *Japaneſe* from the empire of *China*; and that they were ſettled there long before the *Japaneſe* fixed in theſe iſlands in the ſea of *Kamtſchatka* appears from their not knowing the uſe of iron, or iron ore, though it is above two thouſand years ſince the *Mungals* made their arms and other inſtruments of iron, and the other *Tartars* knives and daggers of copper; therefore it is probable that the *Kamtſchadales* were driven hither by the tyranny

ranny of the Eastern conquerors, as the *Lopari*, *Ostiaks*, and *Samojeds* were driven to the extremities of the North by the encroachments of other *European* nations. If *Kamtschatka* had not been inhabited before the *Tungusi* had got a settlement, it is probable they would have fixed here, as being safer from the dangers of any sudden attacks of their enemies. 174

Thus it appears likely, that the *Kamtschadales* lived formerly in *Mungalia* beyond the river *Amur*, and made one people with the *Mungals*, which is farther confirmed by the following observations, such as the *Kamtschadales* having several words common to the *Mungal Chinese* language, as their terminations in *ong*, *ing*, *oang*, *chin*, *cha*, *ching*, *ksi*, *ksung*; it would be still a greater proof if we could show several words and sentences the same in both languages: but not to insist only upon the language, the *Kamtschadales* and *Mungals* are both of a small stature, are swarthy, have black hair, a broad face, a sharp nose, with the eyes falling in, eyebrows small and thin, a hanging belly, slender legs and arms; they are both remarkable for cowardice, boasting, and slavishness to people who use them hard, and for their obstinacy and contempt of those who treat them with gentleness.

CHAP. III.

Of the ANCIENT STATE *of the Natives of* Kamtschatka. 175 622 554

BEFORE the *Russian* conquest they lived in perfect freedom, having no chief, being subject to no law, nor paying any taxes; the old men, or those who were remarkable for their bravery, bearing the principal authority in their villages, though none had any right to command or inflict punishment.

K 175 131 167 A 175 /127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

A K 174 103 192

2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 Italmen language (4). Moreover, the Italmen on the island of

K [101]

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

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F.J. /192 cont./
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3. (cont.)
of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[2]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

7 [Footnote "(5)" appears on p. 409 -- Analyst]

000 /192 cont./

"Ssissa" (5). In view of the lack of any contact between the Amur

S.S. 175 101 174 439 F.J. 101

5. The Chinese traders on the Amur and Sungari use the same name for the Japanese. Even in the Sungari region Venault heard of a "Si-san" country to the north, which he hoped to reach on his trip down the Amur (1850). On the way, he was told by Chinese traders that they themselves never went to Si-san, but only traded with it through the mediation of the Jupi-tatse. On the basis of all the information that he had collected, he suspected that "Si-san" was the island of Karaftu (Sakhalin) (see his "Excurs. dans les parties intér. de la Mandchourie" -- Nouv. Ann. des Voyages, fifth series, Vol. XXX, 1852 [Vol. II], pp. 207, 215, 222, 224).

S.S. [113]

K SS. FJ 101 114 ● 174 177 A 101 A [133] A F.J. 101 175

In view of the lack of any contact between the Amur peoples and the Kamchadal and their completely different languages, the almost identical name that they have for the Japanese indicates that they must have taken it /193/ from the same source. And this source is easily found. It is the Ainu: for the Amur peoples, the Ainu of Sakhalin; for the Kamchadal, the Ainu of the Kuriles. Just as the one bridge, Sakhalin, leads from Jesso /Yesso/, the main island of the Ainu, to the Amur region, so the other bridge, the island chain of the Kuriles, leads from Jesso to Kamchatka. It is known from Japanese as well as European sources that the Ainu of Jesso have a similar name for the Japanese. In the description of Jesso written in the seventeenth century by the Japanese Kannemon and translated by Titsingh (1),

A F.J. [113]

1. "Jeso-ki, ou Descr. de l'île de Jesso," etc., compiled by the interpreter Kannemon and published in 1632; translated by Titsingh,

2: Schrenck--895 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu ABG

/571 cont./

000 Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

K 177 192 174 325

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

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2: Schrenck--896 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Kamchadal RY3
Ainu AB6

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/572 cont./

their eyes, of course, were surrounded with the aura of great wealth and esteem, made those knives, swords, and the like which they themselves (the Ainu) prized so highly and paid for so dearly in trade with them. How very much this was the case can be seen from Steller's information that the Kurile Ainu gladly gave 20 sea beavers for an old Japanese saber and thought that they had made a very good trade, but wore such sabers only on festive days or during festive processions and made "the strangest figures during the welcoming" with them.

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For the moment it must remain undecided whether the above-mentioned iron needles, which came from Japan to the Kamchadal as their first iron implements, spread from the latter to their neighbors, the Koryak and the Chukchee, before iron was brought these peoples by the Russians. At any rate, three Paleo-Asiatic peoples, the Ainu, the Gilyak, and the Kamchadal, received iron from Japan, and this was a natural consequence of the geographical position of the latter in the vicinity of these peoples, for just to the north of Nippon, the principal island of Japan, is the island of Jesso, the principal region of the Ainu (1),

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1. The view advanced chiefly by Ph. Siebold that the Ainu formerly also inhabited the north of Nippon (see above, p. 255) has recently been attacked by Brauns ("Die Bewohner des Japanischen Inselreichs /The Inhabitants of the Japanese Island-Realm/" in the Jahresber. des Frankfurter Vereins für Geogr. u. Statist., Years 48 and 49, 1883-1884, 1884-1885, Scientific Part, pp. 5 ff).

which, in turn, on the one hand, leads to the half-Gilyak Sakhalin, and, on the other hand, via the chain of the Kuriles, to Kamchatka. One may therefore draw the further conclusion that at the time when these peoples lived farther in the interior

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/572 cont./
of the continent (2), as may be presumed for various reasons,

2. See p. 247 above /untranslated/.

they still had no knowledge of iron and obtained this only after they had become peripheral peoples, that is, after they had been pushed to the extreme eastern coast of the mainland and to the islands and peninsulas lying in front of it and had thus arrived in the vicinity of Japan (3).

3. The question as to the origin and development of ironworking in Japan lies, of course, outside the scope of this work.

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If we now return to the Gilyak after this digression, this is the place, in concluding the above discussion of their weapons used for hunting on land and on the water, to mention a few other pieces of their armament. First to be mentioned here are two

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types of armor (Gilyak petsch) which are completely different in form, material, and origin, /573/ and which, to be sure, are no longer in use at present, but are of no little historical-ethnographic interest.

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One of them is iron armor (Gilyak wytsch-petsch). This consists of thin, longish, iron lamellas provided with holes, by means of which they are fastened close to one another on animal or fish skins with straps. The headpiece of this armor (Plate XLIV /see p.1024/, Fig. 2) has the shape of a helmet. The upper, rounded ends of its iron lamellas are bent back somewhat and wound with a strap; a piece designed for the protection of the neck hangs down from its lower edge. The breast or body piece (ibid., Fig. 3), of which I saw only individual parts (in the village of Tebach) consists of several rows of iron lamellas overlapping from top to bottom, which are wider and longer than those of the headpiece. In speaking of the Smerenkur (Gilyak) of Sakhalin, Mamia Rinsô (1) mentions this iron armor and says

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1. Op. cit., p. 194.

Ka 144 ("small beards, Kalmuck type of face, and inclined nose") is applicable more to the Kamchatka than to the Eskimo type.

Ka 144 Ko 144 C 144 Our studies thus indicate that in spite of the presence of the Eskimoid element in the racial composition of the coastal Koryak and the Itelmen, there exist--parallel to them--fairly definite traits of the Kamchatka type. In making a chart for the racial composition of the Kamchatka Oblast we shall use a double cross to indicate a definite prevalence of a given type, a simple cross to indicate the presence of a particular type as one of the basic components, and a vertical line to indicate the existence of a small but still perceptible admixture.

[8] [Table on p. 8:]

Types	Eskimo	Itelmen	Kamchadal	Coastal Chukchee and Koryak	Reindeer Chukchee and Koryak	Lamut	Descendants of ancient Russian immigrants
Eskimo							
Kamchatka							
Paleo-Siberian							
Light Europoid							

The Problem of the Genesis of the Kamchatka Type in the Light of the Conducted Studies

Ka 174 144 Ko 144 The results of the studies conducted in 1947 did not provide a definite answer to the posed question. Both the coastal Koryak and the Itelmen hold an intermediate position between the characteristic representatives of the Kamchatka and the Eskimo types. However, this fact tends to favor more the hypothesis that the Kamchatka type was formed without a

Ka Lamut admixture. The conjecture that there is a very small
174 degree of probability that such mixing was significant among
144 the Itelmen preserves its force. As for the Eskimoid or (what
Ko in the present case is the same thing) the Americanoid traits
144 of the Itelmen, we must take into consideration the fact that the Kamchatka type is not aboriginal in Kamchatka. It was preceded by the Americanoid proper type, whose representatives did not have the epicanthus. It is little probable that the ancestors of the present-day American Indians--who had at one time lived in northeastern Asia--had not spread out throughout the Kamchatka Peninsula, that all of them had migrated to America, and that new ethnic waves which brought to this area people with Mongoloid traits, found this region uninhabited. One can hardly doubt that the ancient inhabitants of this region assimilated with the later immigrants and left an imprint on their racial characteristics.

It thus follows that while our studies do not lead to a denial of the presence of a Lamut admixture among the Reindeer Paleo-Asiatics, they indicate the existence of the Kamchatka Mongoloid type formed independently of this admixture.

C The Immediate Tasks of Further Research

174 Having defined the basic types obtained among the population
144 of northeastern Asia, we must determine the routes by which they penetrated into the given territory. Theoretically, one
Ka can conceive of the following routes:
174 a) from southeastern Asia:
144 1. over the islands (Japan and the Kurile Islands),
2. over the continent, along the western coast of the Sea of Okhotsk;

b) from Siberia:
1. from the interior regions,
2. along the coast of the Arctic Ocean;

c) back from America.

The last route is possible only in the case of the Eskimo type and is definitely excluded in the case of the Kamchatka type. If we assume this possibility, we must first determine the place of the Eskimo and the Kamchatka types in the racial framework, i.e., we should undertake a detailed morphological comparison [9] of them with other Mongoloids (Siberian and south Asiatic) and also with the American Indians.

Ka 1. A similarity of the Kamchatka type to the best-known
144 type of the population of the Siberian interior obtains only in

Ka gathering skulls somewhere in the area of the Chaun Bay must
141 lead to fruitful results and may be regarded as one of the next
121 tasks of our study.

114 3. Finally, we should not forget that the conclusion that there exists a profound anthropological difference between the Paleo-Asiatics and the American Indians has been made on the basis of very superficial scholarly ideas about the racial peculiarities of the native population of North America. Many peoples of North America (for example, the Northern Athabascan Indians) have generally remained uninvestigated and the scientific data available with regard to other peoples are confined in most cases to a few measurements and to the most sketchy kind of description. The existing craniometric data, insofar as they lack the most essential measurements, such as those of the nasal profile and of the face as a whole, are completely inadequate. It follows, therefore, that we should undertake special projects of studying craniological collections of the American museums.

Ka 4. Paleoanthropology of Japan may provide important leads
174 to the study of the possible migration routes via islands into Kamchatka. If it is true that the ancient population of Japan was of the Ainu race, the route via the Kurile Islands is excluded in the case of both the Eskimo and the Kamchatka types. (3)

3. If we shall regard the Ainu type as an original Proto-Mongoloid form--a hypothesis which, though improbable, cannot yet be discarded.

[17] However, the paleoanthropology of Japan is so poorly developed (in spite of the relative abundance of material) that the hypothesis presuming a very ancient character of the Mongoloid elements encountered on the territory of Japan, and holding that at least one of the population types which inhabit Kamchatka may have penetrated there via the Kurile Islands may not be regarded as finally disproven.

000 As a result, the organization of the exploration of paleo-anthropological materials contained in the Japanese museums is also one of the next tasks of our future study.

5. In studying the problem of the continental migration route along the Okhotsk seaboard, we must define more accurately the outline of the areal [basic unit in biogeography] of the Eskimo type, which seems to skirt the northeast of Asia. With this purpose in mind, we shall in the nearest future investigate

000 the Koryak of the Karaginsk and the Olyutorsk rayons and the small group of the so-called "Kerek."

Furthermore, it is essential to study again the Tungus of the Okhotsk seaboard, who--according to the data provided by Levin--have some Eskimoid traits.

These projects should include also the Tuguro-Chumikansk, the Zeysko-Bureinsk, and the Aldansk Tungus who up to this time have remained almost completely uninvestigated.

6. At this stage of our work the anthropological data with regard to northeastern Asia are insufficiently related to the data in the fields of linguistics, ethnography, and archaeology --a situation which is to be explained by a relative backwardness of scientific work in these fields in the recent times.

Ko 197 Ka 197 174 144 C 197 If--as Bogoraz thought--the Chukchee, the Koryak, and the Itelmen languages are, in fact, characterized by certain common linguistic features, (4), and if the appearance of these

4. The question is raised, of course, only with regard to the Itelmen language. The relationship of Chukchee and Koryak is quite obvious.

languages in northeastern Asia was connected with the migration from the outside, it is a tenable hypothesis that the migratory flow brought the Kamchatka racial type. The further development of this hypothesis is prevented by the absence of serious linguistic studies about the degree and character of relationship of the languages of northeastern Asia among themselves and with the languages spoken by peoples inhabiting other regions.

Ka 174 The distribution of the Eskimo and the Kamchatka types does not reveal their connection with the contemporary ethnic classification of the Paleo-Asiatic group. [18] It may be presumed that we are dealing here with a trace of a more ancient ethnic demarcation. Does this distribution not reflect the division of the people in question into reindeer raisers and coastal (bank) hunters? Unfortunately, we do not possess any data about the culture of the internal regions of southeastern Asia before the introduction of reindeer raising.

Ka 144 174 The question of chronological appearance of the Eskimo and the Kamchatka types in northeastern Asia cannot, it seems, be based only on the study of the present-day population groups. The Eskimo type, which has preserved some Americanoid traits regarded, not without some foundation, as protomorphic

Ka traits of the Mongoloid racial stock, may be regarded as the
144 more ancient of the two types. The morphological peculiari-
174 ties of the Kamchatka type have undoubtedly been developed at a later date. On the basis of this hypothesis we may presume that the latter penetrated northeastern Asia in the wake of the Eskimo type. However, the distribution of the Eskimo type which inhabits, as it were, the fringes of Kamchatka and of the Chukot Peninsula (Chukotka) indicates a later appearance there of the Eskimo type. And we may furthermore take into consideration, as has already been noted, the possibility of the Eskimo migration back from America.

The determination of chronological relationship existing among different racial types almost always requires the assistance of paleoanthropological data. The fact that such data are lacking not only for Kamchatka, but for the entire Soviet Far East, explains the unsatisfactory tempo and volume of the present archaeological work.

The absence of a relatively exhaustive plan of anthropological research is the greatest obstacle to the ethnological synthesis of peoples inhabiting the shores of the Pacific Ocean. A large-scale organization of archaeological exploration is therefore our most urgent task at the present time.

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

many of the Eastern conquerors, as the *Lopari*, *Ostiaks*, and *Samojeds* were driven to the extremities of the North by the encroachments of other *European* nations. If *Kamtschatka* had not been inhabited before the *Tungusi* had got a settlement, it is probable they would have fixed here, as being safer from the dangers of any sudden attacks of their enemies. 174

Thus it appears likely, that the *Kamtschadales* lived formerly in *Mungalia* beyond the river *Amur*, and made one people with the *Mungals*, which is farther confirmed by the following observations, such as the *Kamtschadales* having several words common to the *Mungal Chinese* language, as their terminations in *ong*, *ing*, *oang*, *chin*, *cha*, *ching*, *ksi*, *ksung*; it would be still a greater proof if we could show several words and sentences the same in both languages: but not to insist only upon the language, the *Kamtschadales* and *Mungals* are both of a small stature, are swarthy, have black hair, a broad face, a sharp nose, with the eyes falling in, eyebrows small and thin, a hanging belly, slender legs and arms; they are both remarkable for cowardice, boasting, and slavishness to people who use them hard, and for their obstinacy and contempt of those who treat them with gentleness.

CHAP. III

Of the ANCIENT STATE *of the Natives of* Kamtschatka. 175 622 554

BEFORE the *Russian* conquest they lived in perfect freedom, having no chief, being subject to no law, nor paying any taxes; the old men, or those who were remarkable for their bravery, bearing the principal authority in their villages, though none had any right to command or inflict punishment.

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and
R. the other in the year 1713 upon the river *Awatſcha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

When

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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In the ſummer of the year 1729, a *Japaneſe* veſſel was wrecked upon the coaſt of *Kamtſchatka*: there were ſeventeen men on board, all of whom, except two, were murdered by Lieutenant *Stimicof*, who happened to be there at that time. The two ſurvivors were ſent to *Peterſbourg*, where they had the ſatisfaction of ſeeing the murderer of their countrymen publickly executed. In 1730 *John Novogorodof*, and in 1731 *Meyer Shedfordin*, were tax-gatherers in *Kamtſchatka*. We only mention them as being the occaſion of the great rebellion, which we are now to deſcribe.

CHAP. IV.

175 661 R 177 .17

Of the REBELLION *of* Kamtſchatka, *the Burning of the Lower Fort, the Subjection of the Rebels, and their Puniſhment.*

THE natives had reſolved for a great while to deſtroy all the *Ruſſians* who were in *Kamtſchatka*; but ſince the diſcovery of the paſſage over the *Penſchinſka* ſea, and the arrival of veſſels with new people, it appeared to them too dangerous: but when Captain *Bering* with his fleet ſailed on the expedition of *Kamtſchatka*, and moſt of the Coſſacks who were ſettled in *Kamtſchatka* were ordered to join Captain *Paulutskoy* at *Anadir*, to ſuppreſs the rebellious *Tchukotskoi*, very few Coſſacks were left in *Kamtſchatka*. This the natives looked upon to be the wiſhed-for opportunity; and during the whole winter the *Niſhnaſhaltalski*, *Klutcheſski*, and *Yaloſski Kamtſchadales*, under pretence of viſiting one another, travelled through all *Kamtſchatka*, and inſtigated the other inhabitants to join in their deſigns, under

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

under pain of being intirely destroyed. By these means all *Kamtschatka* entered into a state of open rebellion; and hearing that *Shesticof* was killed by the *Tchukotskoi*, they reported that these people were marching against *Kamtschatka*, with a view either to have a pretence for collecting themselves together, or that the *Russian* Cossacks, out of fear of these people, might desire the *Kamtschadales* to guard them. Their measures were so well concerted, that it was a singular instance of Providence that any of the *Russians* were preserved; for if they had once been driven intirely out of the country, it would have been difficult for them to have re-established themselves. The counsels of the *Kamtschadales* were far from being such as one would expect from savages; they endeavoured to prevent any correspondence with *Anadirsk*, and kept a strong guard upon the sea-coasts, where they might seize upon any of the *Russians* that arrived. The chief authors of this rebellion were one *Yalofski Toyon*, or chieftain called *Fetka Harchin*, who had frequently served the *Russians* as an interpreter, and a chieftain of the *Klutchefski*, called *Chugotche*.

While this conspiracy was in agitation, the commissary *Skacurdin* was on his departure from *Kamtschatka*, with a considerable party to guard the tribute. They had sailed from the mouth of the river *Kamtschatka* towards *Anadir*, but soon after contrary winds obliged them to return. The *Kamtschadales*, informed of their departure, and ready for the revolt, gathered together, and sailing up the river *Kamtschatka* killed every *Russian* Cossack they could find, burned their summer huts, and carried off their wives and children into slavery. Their chief strength was directed against the fort; where arriving in the night, they set fire to the priest's house, concluding that the fire would bring out all the inhabitants. In this they succeeded too well, murdering almost every person, without sparing either sex or age. They burned all the houses, except the fortifications and church, where the goods both of the pub-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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lick and private people were kept. Those who escaped this massacre fled to the mouth of the river, and carried the news to their countrymen, who had not yet left the coast. When the *Klutchefski* chief, *Chugotche*, heard of the taking the lower *Kamtschatka* fort he marched thither, killing or taking prisoners all the *Russians* he met with; and joining *Harchin*, he informed him that the *Russian* vessels were yet upon the coast, for which reason he judged it proper to strengthen themselves in the fort; and sending accounts of their success to all their countrymen, ordered them to join him. The next day they divided all the plunder, and dressed themselves in the *Russian* habits; and some of them, putting on the priest's robes, celebrated their own religious ceremonies and conjurations. *Harchin* ordered a new-baptised *Kamtschadale*, who had learned to read *Russ*, to say mass in the *Russian* manner, and dressed in the priest's robes; for which he made him a present of 30 red fox-skins.

The 3d day after the taking of the fort arrived a *Russian* skipper, *Yacob Hens*, with 60 Cossacks, who was sent with a design to recover the fort from the rebels. He endeavoured by all methods to persuade them to return to their duty, assuring them of a general pardon; but they would not give ear to him: nay, *Harchin*, their chief, told him that he had no business there, and that he was commissary of *Kamtschatka*, and would himself gather the taxes, so that they did not want any Cossacks among them. Upon which *Hens* sent to his vessels for some cannon, and began on the 26th of *July* to fire upon the fort, where he made a very large breach, which caused great confusion amongst the besieged, and gave an opportunity for the women that were prisoners to escape. *Harchin*, finding it impossible to defend the fort, made his escape disguised in women's cloaths; and although he was

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

was purſued by ſeveral, yet he made ſuch expedition that they could not overtake him. After this 30 of the beſieged who remained ſurrendered themſelves; but a *Klutchefski* chieftain, *Chugotche*, with a few people that joined him, held out to the laſt man. During their defence the powder magazine was ſet on fire, which reduced the fort and all the riches in it to aſhes. In this ſiege the Coſſacks had four men killed, and a great many wounded. How many of the *Kamtſchadales* were killed was not known, their bodies being conſumed in the fire; not one eſcaped alive, for thoſe who ſurrendered were killed by the Coſſacks, in revenge for the loſs of their wives and children.

175 669 R. 177 .17

The ſudden return of the *Ruſſian* party was the occaſion that this revolt was ſo eaſily quelled; for it prevented their aſſembling in ſuch numbers, as they otherwiſe would have done. However, it was not yet intirely over, for *Harchin*, with ſome other chieftains, collected a good number of people together, and reſolved to march to the ſea ſide, and attack the *Ruſſian* veſſels which were there. But, in the very beginning of his march, he was met by a party of *Ruſſians*, which obliged him to fortify himſelf upon the left ſide of the river *Kluchefka*; the Coſſacks encamping upon the right, ſeveral ſkirmiſhes enſued between them. When *Harchin* ſaw that he could not accompliſh his deſign, he propoſed to treat with the Coſſacks, and offered to come to their camp, if they would ſend one Coſſack as an hoſtage for him; which they granted. He demanded, That they ſhould not intirely ruin the *Kamtſchadales*, and promiſed that for the future they would all live peaceably, only deſiring that they would allow him to go and prevail upon his friends and relations to conſent to this agreement; which being granted, he ſent word, that he could not prevail with them to make peace; and that even his own brother, and a chieftain, *Javatche*, who had accompanied them, had refuſed to return.

The

175 669 R. 177 .17 The next day *Harchin* came to the bank of the river with ſome other chiefs, and deſired, that the Coſſacks would ſend a boat to bring him over, and give him two Coſſacks in hoſtage; which they agreed to: but no ſooner was he come over than they made him priſoner, and ordered the hoſtages to throw themſelves into the river, and ſwim over, while they fired upon the *Kamtſchadales* on the oppoſite bank, who, when their chief was made priſoner, preſently ſeparated; but, being purſued by different parties, moſt of them were deſtroyed. The chieftain *Teghil*, having defended himſelf a great while, at laſt murdered his wife and children, and killed himſelf; the chieftain *Chugotche*, in vain ſolliciting the inhabitants upon the river *Koſeretſha Shapina* to join him, was in the end murdered by them. After this rebellion, which appeared at firſt very dangerous, and threatened the intire deſtruction of the Coſſacks, was quieted by the arrival of ſuccours, things continued in pretty good order at *Kamtſchatka* until the year 1740, when the *Ruſſians* had ſeven people killed by the natives.

When this rebellion was over, orders were ſent as ſoon as poſſible to Major *Merlin*, with another officer and ſome regulars, together with Major *Paulutſkoy*, to inquire into the cauſe of this rebellion, and the murder of the *Japaneſe*, and to ſend the report thereof to *Jakutſki*; he was at the ſame time to build a new fort, which he did a little lower than the mouth of the river *Ratuga*: this was called the lower fort of *Kamtſchatka*. Having examined into the cauſe of the rebellion, three of the *Ruſſians* were found guilty of death and executed; and two of the chief rebels, with ſome others, both Coſſacks and *Kamtſchadales*, were puniſhed. All the natives, whom they had either taken priſoners, or had made ſlaves of, were reſtored to their liberty. Thoſe *Kamtſchadales* who were put to death, ſeemed to go to execution without the leaſt concern, and under the torture they were ſcarcely heard to moan; nor could they force them to confeſs any thing more than what they had done voluntarily before. ſes

ARCHÆOLOGICAL INVESTIGATIONS IN KAMCHATKA

CHAPTER I

HISTORY

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In 1632 the Russian conquerors of Siberia settled on the Lena River and built a fortified town, Yakutsk, which they used as a central base for further military expeditions. In the course of these expeditions they reached Okhotsk and Bering Seas on the east, the Arctic Ocean on the north and the Amur River on the south.

In the year 1649 the fortress Anadyrsk, on the river of the same name, was founded by the Cossack Deshnev, who had traveled in boats from the mouth of the Kolyma River through Bering Strait to the mouth of the Anadyr River.

Since the founding of the fortress Anadyrsk, Cossack parties have imposed tribute on the Koryak living to the south of Anadyr. From the Koryak the Cossacks learned that the best peltries, such as sables, sea otters (*Enhydris marina*), and sea bears (*Otaria ursina*) were obtained by the Koryak themselves through exchange from Kamchatka. This discovery led to an expedition to the Kamchatka Peninsula.

In 1696, Atlassov, commandant of the fortress Anadyrsk, sent a detachment under the command of the Cossack Morozko to the peninsula of Kamchatka to verify the reports of its wealth in peltries. The following year, Atlassov undertook the journey himself. He sent Morozko with his detachment to the Bering Sea, while he advanced along the coast of the Penshina Bay, gathering tribute from the crossing country. Morozko did likewise on the coast of Bering Sea. Atlassov and Morozko met on the Tighil River where the Kamchadal territory begins. They advanced together, reached the Kamchatka River, received tribute from the Kamchadal who were living in the valley of the Kamchatka River, and founded the fortress Verkhne-Kamchatsk.

Thus the conquest of Kamchatka was begun. When the Russians had settled in Kamchatka, the Peninsula, as well as the Koryak territory to the north of it, became dependent upon the fortress Anadyrsk. The sea route from Okhotsk to Kamchatka was at that time unknown, and the land journey through the territory of the turbulent Koryak was considered quite impossible. In those days Kamchatka was the most valuable acquisition of the Russian Government in the Far East, and communications of the Yakutsk Administration with Kamchatka

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 R. 177.17

had to be maintained over a long and dangerous route. The way from Kamchatka to Yakutsk lay through the entire Koryak country to the Anadyr River; from there to the Kolyma River over the Stanovoi Mountain; and from there the route lay over the Indighirka and the Yana countries and the Verkhoyansk range of mountains. A great number of the Cossack parties, which started from Kamchatka with tributes of furs, never reached the fortress Anadyrsk. The Koryak killed the Cossacks from ambush and kept the furs. Transports, that had safely reached Anadyrsk, would arrive in Yakutsk three years after they had left Kamchatka. Cossack detachments carrying provisions, gunpowder, arms and cannons from Yakutsk to Kamchatka were also harassed by Koryak attacks. To put an end to such conditions a direct sea-route from Okhotsk to Kamchatka had to be discovered, and the Koryak had to be finally subdued in order that the winter route might be rendered safe.

Until the sea-route from Okhotsk was discovered, the Cossacks of the Kamchatka Peninsula tried to utilize the Pacific Ocean route to shorten the dangerous land trip from Kamchatka to Anadyrsk. They built large boats of boards, and starting from the mouth of the Kamchatka River traveled northward to the mouth of the Alutor River. In 1752, in order to facilitate these expeditions, the Cossacks built a settlement, Alutorsk, protected by a wall, at the mouth of the Alutor River, where Cossack parties could find shelter against the attacks of the Alutor Koryak. During the winter, Cossacks traversed the tundra from the fortified settlement, Alutorsk, to the mouth of the Oklan River, a tributary of the Penshina River, on which a fortress, Oklansk, was built. From Oklansk they traveled northward along the valley of the Penshina River and, having traversed the Nalghinsk Mountains, arrived at the Anadyr River. That part of the way from Kamchatka to the Anadyr which lay between Alutorsk and Oklansk was of course not safe from unexpected attacks of the Koryak.

The unsuccessful attempt of 1712 to reach Kamchatka by sea from Okhotsk was followed in 1713 by a special ukase of Peter I, ordering that a sea-route to Kamchatka be found. All attempts, however, failed until 1716, when a successful journey was made from Okhotsk to Tighil in a large boat. Thus the dependence of Kamchatka on the Anadyr route was brought to a close, and communication between the peninsula and Yakutsk was henceforth carried on directly by way of Okhotsk.

THE BERING EXPEDITIONS

The discovery of a sea-route to Kamchatka gave an impetus to geographical explorations in Bering Sea. In 1726 the first expedition of Bering was undertaken, followed by a second in 1737–45. In the interval between these expeditions, which were scientific in character and had no direct relation to the administration of Kamchatka, the Kamchadal were finally subdued.

Professor Golder[1] is of the opinion that Peter I, on his own initiative, set on foot Bering's Expedition in order to determine whether Asia is united with or

[1] F. A. Golder, *Russian Expansion on the Pacific, 1641–1850*, Cleveland, 1914, p. 133.

CHAPTER II

JAPANESE SHIPWRECKS NEAR KAMCHATKA SHORE

177 Restrictive legislation of the Shoguns, concerning Japanese navigation, tended
● 195 to keep Japanese boats in home waters, but storms of the rough Japanese Sea often brought them to Kamchatka.

About the end of the seventeenth century one Japanese junk, after losing its mast in a storm, for six months was carried about by the currents until it was thrown up on the western shore of the Kamchatka Peninsula, not far from the mouth of the Opala River. Of the twelve Japanese who were in the junk, three were taken prisoners by the Kamchadal and nine succeeded in escaping in their junk in an unknown direction. Two of the three prisoners soon died from the Kamchadal diet, to which they could not become accustomed. The name of the Japanese who lived was Denbei. The Cossack chief Atlassoff, during his campaign in Kamchatka of 1697–1699, learned from the Kamchadal of their Japanese prisoner. He took him to Anadyr, and in 1701 he was brought to Moscow, and in January 1702 he was presented to Peter the Great. Denbei was the first Japanese who reached Russia and from him the Czar got his first information of Japan. At the order of the Czar, Denbei taught some Russians the Japanese language. The Czar promised to let him go home, but did not keep his word. Denbei was ordered to be baptised and received the name of Gabriel.

In 1710 another Japanese junk was wrecked on Kamchatka's shore to the north of Avacha Bay. There were ten Japanese, four of whom were killed by the Kamchadal and six taken prisoners. Some were taken from the Kamchadal by the Russian conquerors and kept in their fortresses where they were taught Russian. One of the prisoners, Sanime by name, was brought to St. Petersburg in 1714.

In July 1729 a third Japanese vessel was brought to Kamchatka, somewhere between Lopatka and Avacha, having on board 17 Japanese. It was a trading vessel which carried goods from Satzuma to Osaka. Soon after landing the Japanese were discovered by the Cossack chief, A. Stinnikov, and the Kamchadal accompanying him. At first the Japanese were well treated. When the Japanese saw that Stinnikov was plundering goods from their wrecked vessel, they tried to escape in a small boat, but Stinnikov ordered his Kamchadal to overtake and kill the Japanese. A part of them were killed by arrows, lances or sabers, obtained from the Japanese themselves. Some of them were drowned. Only two remained alive—a wounded boy, Gonza, and an adult Japanese, Soza, who were dragged from the water. When the news of the Japanese massacre reached the higher authorities an order was given to arrest Stinnikov, and he was hanged for his crime. Gonza and Soza were sent to European Russia. In 1734 they reached

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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St. Petersburg and were presented to the Empress Anna Ioanovna. In the same year they were baptized; Gonza was named Damian Pomortzev, and Soza, Kosma Shultz. They were charged to teach Japanese to the students of the Academy of Sciences. Neither lived long—Soza died in 1736 at the age of 43 and Gonza in 1739, being only 21.

Some years later (1745) other Japanese wrecked at Kamchatka's shore were brought to St. Petersburg for the same purpose, but the Japanese were simple fishers and hardly could be used as teachers.[1] Such wreckages of Japanese ships repeatedly took place about that time. The explorer Lesseps mentions nine Japanese whose ships were wrecked at the Aleutian Islands in 1788 and whom he brought to Kamchatka.[2]

THE UPRISING OF THE KAMCHADAL

THE CAUSES OF REVOLTS

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The causes of revolts of the Kamchadal were the cruelty, violence, greediness with reference to fur-skins, and the licentiousness of the Cossack chiefs and soldiers on the peninsula. On the other hand frequent mutinies of Cossacks against their chiefs and the incessant feuds between the chiefs and their parties could not inspire respect from the oppressed natives. Numerous local revolts had taken place from the very beginning of the occupation of the country by the Cossacks. Rebels and victors were equally merciless in their encounters. A general uprising of the Kamchadal which had been fomenting for a long time broke out in 1731. The Kamchadal were ready to rise before that date but did not dare to do so.

In 1729 Kamchatka was visited by the first scientific expedition of Bering and his companions who had armed crews. The ship *Gabriel*, with a crew of one hundred men belonging to the military expedition of the Cossack chief, Afanassy Shestakoff, remained in Nishne-Kamchatsk until July 1731. According to the original plan of Shestakoff's military expedition, the *Gabriel*, after leaving Okhotsk, was to visit Kamchatka and to proceed from there to the mouth of the Alutor River, where the commander of the expedition, Shestakoff, expected to arrive by land from the shore of the Okhotsk Sea, in order to subdue the Alutor Koryak; from there it was intended that the ship should sail to the mouth of the Anadyr River, exploring the shores on the way, and continue up the river to the fortification at Anadyrsk, which Shestakoff intended to reach by land. But Shestakoff's party was defeated and he himself killed by the Koryak after he had crossed the Paren River. When the news of Shestakoff's death arrived, the *Gabriel* remained in Kamchatka, awaiting further orders. In June 1731 she was ordered to proceed to the Anadyr and to enter the service of Pavlutsky, Shestakoff's lieutenant.

As soon as the *Gabriel* had weighed anchor and gained the open sea, the Kamchadal attacked the fortress Nishne-Kamchatsk and took possession of it. Presently a detachment was despatched to take Verkhne-Kamchatsk and Bol-

[1] W. W. Barthold, *Die geographische und historische Erforschung des Orients mit besonderer Berücksichtigung der Russischen Arbeiten*, Leipzig, 1913, p. 130.
[2] M. de Lesseps, *Travels in Kamchatka*, English Translation from French, vol. 1, London, p. 208.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 669 R. 177.66

sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

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The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

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In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropavlovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts with secretly lifting doors.[1] The Russians were met with simulated pleasure. Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

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Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and now as storehouses.

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(54) Four ornamented pottery fragments (2940).
(55) Figure 51 (2941), fragment of some bone implement, much decayed, possibly a part of a sledge runner, 2/9 natural size.
(56) Figure 52 (2943), a bone hook of reindeer antler, probably used as a root digger, 1/3 natural size.
(57) Two handles of bone spoons (2944, 2945).
(58) Six fragments of bone implements (2946).
(59) Four fragments of bone implements (2947).
(60) Seven fragments of bone implements (2948).
(61) Four scrapers (2949).

We see from the number of specimens found (about 230), that the excavation of the Kavran site was particularly productive.

The ancient site on the bank of the Osernaya River is 2 miles from the point where it flows out to the sea from the Kuril Lake. There were several depressions of former dwellings, and we excavated the largest of these. The pit before digging was 2 feet deep. Then followed a layer of black earth more than a foot deep, after which the primeval soil consisting of gravel appeared. In the layer of black earth were found traces of a fireplace, two whetstones, two pottery fragments, one of

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which had a handle inside, and a Japanese coin. Remains of posts were not discovered. The pit had a rectangular form like the pits on the shores of the Nalacheva Lake. Those of the Kulki and Kavran Rivers had rather a circular form.

Higher in the rocky bank over the described pit was a small depression resembling a pit. We excavated it and found a layer of mold about a foot deep in which were only a fragment of pottery, with an ear inside, and some bones of a bear.

We came to the ancient site on the shore of the Kuril Lake on August 8 and diggings were carried on from August 9 to 14. We left the lake August 16. In order to reach Lake Kuril we had to ascend the Osernaya River, flowing out from the lake into Okhotsk Sea. The river is fifty-five miles long.

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The mouth of the river is connected with some historical episodes. During the Russian-Japanese War, in May of 1905, a fleet of Japanese schooners landed there with the intention of taking possession of Kamchatka. The Japanese were volunteers, numbering 150, under the command of the retired Captain Hundzi Naridata. At that time there was no settlement at the mouth of Osernaya River. The Japanese put up a trenched camp, mounted their only cannon and hoisted a Japanese flag. Except the visit to Petropavlovsk by Admiral Togo's squadron,

5: Jochelson A-5 (1910-11) 1928 Kamchatka.

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[197] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other
[614] diseases which devastated entire districts. The remnants of the various clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half
648 of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 541 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

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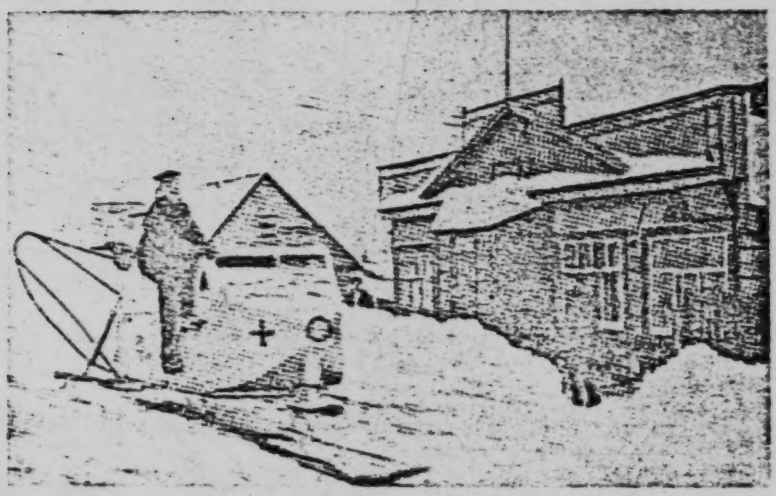

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Wheel transport such as the cart, was unknown before the Revolution. For cattle, the Itel'mens built cold barns or sheds and provided some supplementary fodder in winter. However, the milk yield was very low, and livestock mortality was high.

From the Russians, the Itel'mens obtained improved means of production: firearms, nets, etc. Stone and bone implements were completely abandoned in favor of metal ones. Russian clothing and utensils began to come into use. The primitive semidugout was gradually (and by the beginning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Itel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and peasants, who were systematically being resettled on the peninsula after the middle of the 18th century, married Itel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Itel'men.

In the early 20th century, the condition of the Itel'mens deteriorated in consequence of the development of the Japanese capitalist fishing industry in Kamchatka. Predatory industrial fishing at the mouths of rivers during spawning runs caused almost annual failures of the native catch and led to inevitable famines.

175 648

Contemporary Life of the Itel'mens

During the civil war in the Far East, the Itel'mens actively helped the guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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His history is known. During the troubles of 1769 he served in Poland under the colours of the confederates. His intrepidity induced them to make choice of him to command a medley troop of foreigners, or rather robbers, like himself, whom they kept in pay, not from choice but necessity. With Beniowsky at their head, they ransacked the country, massacring every one they met. He harassed the Russians, to whom he was as formidable as to his own countrymen. They soon felt the necessity of getting rid of so dangerous an enemy: he was taken prisoner, and it may be supposed they adopted no very lenient measures respecting him. Banished to Siberia, and afterwards to Kamtschatka, his fiery and vindictive genius accompanied him. Escaped from the mountains of snow, under which the Russians supposed him to be buried, he suddenly made his appearance at Bolcheretsk with a troop of exiles, to whom he had imparted a spark

of

114/175 of his own audacity. He ſurpriſed the garriſon and took poſſeſſion of the arms; the governor, M. Nilloff, was killed by his hand. There was a veſſel in the port; he ſeized it: every one trembled at his aſpect; all ſubmitted to his will. He compelled the poor Kamtſchadales to furniſh him with the proviſions he demanded; and not content with the ſacrifices obtained, he gave up their habitations to the unbridled licentiouſneſs of his banditti, to whom he ſet the example of villainy and ferocity. He embarked at length with his companions, and ſailed, it was ſaid, towards China, carrying with him the execrations of the people of Kamtſchatka. This ſuppoſitious Frenchman was the only one they had yet ſeen in the peninſula; and from ſuch a ſpecimen of our nation, they certainly could not love, and had ſufficient reaſon to fear us.

000 M. Schmaleff quitted us at break of day, and

22: Guillemard T-2 (1882) 1886 Kamchadal

211 There are no roads even in the little settlement itself, and,
361 from the irregular distribution of the houses, and the equally
363 irregular ground on which they are built, the traveller has to
493 pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the celebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lesseps's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

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175 town so insignificant, we could hope to gain no sympathy at the hands of other nations. The whole story was related to us by Captain Hunter, who was himself an eye-witness of the occurrence, but the details have been so clearly and concisely given by Mr. Whymper in his "Travel and Adventure in the Territory of Alaska," that I make no apology for quoting his account.

"In the autumn of 1854 (28th August[1]) six vessels of war—French and English, comprising the *President*, *Virago*, *Pique*, *La Forte*, *L'Eurydice*, and *Obligado*—arrived off Avatcha Bay: a gun, placed near the lighthouse at the entrance, was fired by the Russians, and gave the inhabitants of Petropaulovsky notice to be on the alert. Admiral Price immediately reconnoitred the harbour and town, and placed the *Virago* in position at a range of two thousand yards.

"The Russians were by no means unprepared. Two of their vessels, the *Aurora* and *Dwina*, defended the harbour, and a chain crossing the narrow entrance shut it in. There were seven batteries and earthworks, mounting about fifty guns of fair calibre.

"The *Virago* commenced the action with a well-directed fire and several of the batteries were either temporarily or entirely disabled. The one farthest from the town on the western side was taken by a body of marines landed for the purpose. The guns were spiked. There were three batteries outside and on the spit, two at the termination of the promontory on the western side of the harbour, and one in a gorge of the same which opens on Avatcha Bay. It is in this little valley that the monument to La Perouse stands.

"The town was well defended both by nature and art. The hills shut it in so completely that it was apparently only vulnerable at the rear. There a small valley opened out into a flat strip of land immediately bordering the bay, and, although there was a battery on it, it seemed an excellent spot to land troops.

"Our vessels having taken up a new position, and silenced the batteries commanding it, seven hundred marines and sailors were put ashore. Half of them were English, half French; a large number of officers accompanied them, while they had for guides two Americans, said to know the ground. They appear to have expected a very easy victory, and hurried in a detached and straggling style in the direction of the town, instead of proceeding in compact form, in military order. A number of bushes and

[1] This date does not agree with that on the monument, where it is given as the 20th-24th August.

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175 small trees existed, and still exist, on the hill-sides surrounding this spot; and behind them were posted Cossack sharpshooters, who fired into our men, and either from skill or accident, picked off nearly every officer. The men, not seeing their enemy, and having lost their leaders, became panic-struck, and fell back in disorder. A retreat was sounded, but the men struggling in the bushes and underbrush (and in truth, most of them, being sailors, were out of their element on land), became much scattered, and it was generally believed that many were killed by the random shots of their companions. A number fled up a hill at the rear of the town. Their foes pursued and pressed upon them, and many were killed by falling over the steep cliff in which the hill terminates.

"The inhabitants—astonished at their own prowess, and knowing that they could not hold the town against a more vigorous attack—were preparing to vacate it, when the fleet weighed anchor and set sail, and no more was seen of them that year."

The actual number that fell in this engagement is uncertain. In the "Nautical Magazine" for October, 1855, it is stated that we lost 107 killed and wounded, but we were told that the total number of French and English who fell was 170 men. Under the hill at the back of the town still stands a rude enclosure, whose dilapidated white palings surround three crosses, beneath which Russians, French, and English lie side by side. Others were buried where they fell. The bodies of some of the officers were borne from the field by the Allied Forces, and interred at the entrance of the Tareinska Harbour on the opposite side of Avatcha Bay. They lie on a small promontory on the land side, opposite a little island. We had hoped to visit the spot, but the limited time we had at our disposal, and the preparations necessary for our expedition through the interior, prevented us. We were told that, in the spring of the preceding year, a party, of which our informant formed one, had searched in vain for the graves, in spite of that of the English admiral having been marked by a cross. The death of this officer is by the inhabitants of Petropaulovsky attributed indirectly to the result of the engagement. As a matter of fact, it occurred, I believe, upon the preceding day; the troops during the affair being under the command of the French admiral.

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175 In the opinion of those who had been in Petropaulovsky at the time, the disaster was chiefly due to the division of the forces on landing,—one body getting ahead of, and being fired into by the other. The thickness of the bush prevented a recognition of this error, and the attacking party imagined themselves taken in rear. The Cossacks took advantage of the mistake, and before long the Allies were in a state of confusion which the nature of the ground rendered hopeless. More met their death by being driven over the precipice, it was said, than actually fell before the rifles of the Cossacks.

The victors were left in peace for the time being, but, in the spring of the following year, the Allied Squadron once more made its appearance. The *President*, *Pique*, *Dido*, *Brisk*, *Encounter*, and *Barracouta*, together with the French frigate *Alceste*, assembled off Kamschatka, and entered Avatcha Bay on the 31st May, 1855. They found the town completely deserted by the Russians. Three foreign residents alone remained, and from them they learned that the settlement had been evacuated by order of the Emperor upon the breaking up of the ice. Even the natives had fled. On the 7th June the batteries and magazines, which had been strengthened and increased in number since the engagement in the preceding year, were blown up, and two days later all the Government buildings were burnt to the ground. The latter proceeding was, in all probability, the wanton act of some English blue-jackets, and was done without the knowledge of our authorities. It was an unfortunate occurrence, the explanation of which could hardly be expected to be believed by the Russians, and the affair still rankles in the breast of the inhabitants of the little settlement.

A few days later the Squadron left, and the inhabitants returned to their homes. Poor little Petropaulovsky has to rest content on her honours of 1854, for the town has never been re-fortified, and is now no longer a military post.

231 One cannot be long in Kamschatka without making the
492 acquaintance of that very necessary animal, the sledge-dog. When

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000 The history of the further conquest of Siberia is of no very great interest. Shortly after the arrival of the Czar's forces Yermac was surprised by a body of Kuchum Khan's adherents, and was drowned in his attempt to escape, and the Russians were for the time being driven out of the country. It was only for a brief period. They returned in greater strength, and rapidly reduced the Tartars to submission. Thenceforward their progress eastward was almost unchecked. The rude tribes were unable to stand against the superior discipline and arms of the more civilised nation, and in less than a century the Muscovite and the Celestial faced one another in the provinces of the Amoor. The hostilities that ensued were not of long duration. The Czar was wise enough to foresee that a protracted war with such a powerful nation as the Chinese could by no possibility end in his favour, and ultimately a treaty was signed at Nerchinsk in 1689, by which a system of commerce was established between the two nations, and the advance of the Russians checked in south-east Siberia.

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No such check had, however, occurred in the north-east, and even before the Nerchinsk Treaty the Russians had established themselves at Anadyrsk,—practically, although not actually, the Ultima Thule of the Asiatic continent. Here a fort was built, and a governor appointed, who was instructed to collect the tribute of furs from the natives, and to inform himself of the countries beyond and to the south of his district. At that time the half-fabulous Strait of Anian was the supposed boundary of Asia, and Kamschatka, of which the Russians had only dimly heard through the medium of the natives, was believed to be joined to the northern portion of Japan. The existence of Bering's Straits was not proved until nearly forty years later, but hardly a tenth of that time had elapsed before the Cossack troops had penetrated the peninsula and built a fort at Werchni Kamschatka, in the very heart of the country.

To whom the honour of the actual discovery of Kamschatka is due is a disputed point, but the claims of one Theodot, a Russian

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trader, seem to rest upon something more than mere tradition. This individual is said to have sailed down the Bova River to the Polar Sea, and to have made his way thence by way of Bering's Straits to Kamschatka. Here he wintered, and in the following summer rounded the southern point of the peninsula, and entered the Sea of Okhotsk. He is said to have been killed by the Koriaks on his return overland to Anadyrsk, or to have died of scurvy, but the accounts of the expedition are both scanty and uncertain, and nothing was known of the country he was said to have discovered until the end of the seventeenth century.

In 1697 Vladimir Atlasov was sent from Yakutsk to take the command of the district of Anadyrsk, and in the following year he despatched Luke Moroskoi, a Cossack, with a guard of sixteen friendly natives, to collect the tribute from the country lying to the south. On their return they reported that they had penetrated the north of Kamschatka, and Atlasov, tempted by their description of the country, resolved on conquering it without delay. He accordingly started with a force of sixty Cossacks and about the same number of natives, and sending half under Moroskoi towards the Pacific, he marched southwards to the River Tigil. He met with but slight resistance from the Kamschatkans themselves, but his own natives revolted, and killing three of his Cossacks and wounding several others, they were with difficulty overpowered. Atlasov effectually prevented the recurrence of such an event by putting the remaining rebels to death, and notwithstanding the greatly reduced number of his followers, eventually reached Tigil, where he effected a junction with the second party under Moroskoi. The indomitable courage and resolution with which this mere handful of men ventured into the midst of a hostile nation, in a country which is one of the wildest and most impassable in the world, is worthy of the highest admiration. In spite of having reduced the tribes at the north of the peninsula, they had no thought of return. From Tigil they marched to the Kamschatka River, and ascending it almost to its source, built a fort upon its banks,

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where the village of Werchni Kamschatka now stands. This was garrisoned with fifteen Cossacks, and the remainder of the force returned in safety to Anadyrsk after an absence of two years.

The tribute obtained as the result of this expedition was a very valuable one, consisting of over three thousand sables in addition to other furs. This booty Atlasov himself conveyed to Moscow, and, as a reward for his services, was made Chief of the Cossacks at Yakutsk, and ordered to return at once to Kamschatka. Unfortunately for him, he fell into temptation by the way. A Russian merchant was unlucky enough to meet his party, and proved too tempting a morsel for the conqueror of the peninsula. The predatory instinct prevailed, and Atlasov eased him of the Chinese goods with which he was returning laden. Justice, however, seems in this case to have overtaken the delinquent rather more rapidly than is usual in the dominions of the Czar. He was at once seized and thrown into prison, where he remained for nearly five years.

During this period affairs in the newly-conquered country were by no means progressing as smoothly as might have been expected from the ease with which it had been annexed. Forts had been built both on the Yelofka River and where Nischni Kamschatka now stands, but the natives had given much trouble, and had killed several of the tax-gatherers, while the garrison of the upper fort, after remaining there for three years, had been murdered to a man on their homeward march to Anadyrsk. Upon the return of Atlasov, however,—for he had been invested with full authority, as before, on his release from prison in 1705,—a force was at once despatched to punish the rebels, and the Cossacks for the first time appear to have reached Avatcha Bay, where they encountered a body of eight hundred Kamschatdales. Certain of victory, the latter had provided themselves with ropes to secure their prisoners, but though the Cossacks were taken by surprise and greatly outnumbered, they eventually gained the day, and the natives were put to flight with great slaughter.

The Russians were now permanently established in the

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peninsula, and as they had been much increased in strength by reinforcements sent from Yakutsk, the tribute levied on the natives became more valuable. But the lawless nature of the Cossacks effectually prevented a peaceful settlement of the country. Atlasov, who was probably no worse a character than his subordinates, openly appropriated the Government tribute, and was guilty of such gross cruelties to the natives and his own Cossacks that the latter seized and imprisoned him in 1707. Intelligence of the rebellion having reached the Yakutsk authorities, Peter Tcherekov was at once despatched to restore order, but the difficulties of travel and other causes combined to delay him, and it was not until two years later that he reached Kamschatka. Shortly afterwards he was joined by Joseph Mieronov, who had been sent to supersede him; and thus, in 1711, there were no less than three governors in the country at the same time. This *embarras* of rulers did not trouble the mutineers long. Tcherekov and Mieronov were murdered by their Cossack guard, and Atlasov met his fate at the hands of his own men—a punishment which, it must be confessed, he only too richly deserved.

The mutiny was indirectly the cause of further discoveries in the peninsula. The Cossacks became so afraid of the consequences of their crimes that they resolved, if possible, to expiate them in the eyes of the authorities by marching against the natives in the south-west, who had hitherto refused to pay tribute. At the same time they sent a letter to Yakutsk, accusing the murdered men of having systematically embezzled the tribute. Their expedition was completely successful. They descended the Bolchaia-reka, destroyed several of the fortified villages, killed great numbers of the natives, and finally built a fort upon the present site of the settlement of Bolcheresk. The natives were thus completely reduced, and the mutineers added further to the knowledge of the country by visiting the most northern of the Kurile Islands—on which no Russian had ever previously landed—and compelling the inhabitants to pay tribute.

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Onsiforov, the ringleader of the mutineers, returned to the Kamschatka River in 1712, and partly in consequence of these services, partly, no doubt, because of the strong force by which he was attended, his various misdeeds were passed over in silence, and he was again employed in expeditions against the natives. The country was at this time in a condition of the greatest insecurity. The Cossacks, under little or no control, killed and pillaged the Kamschatdales at every opportunity, and the tax-gatherers were constantly murdered in retaliation. Frequent mutinies took place, and from the state of anarchy into which the country had fallen, no tribute reached Yakutsk between the years 1707 and 1714. The exploration of the country nevertheless continued. More of the Kurile Islands were discovered, and in 1715 communication by sea was established between the ports of Okhotsk and Bolcheresk, which led to the discontinuance of the overland route to Yakutsk *viâ* Anadyrsk. Not only was the former far more direct and rapid, but it was also attended with much less risk; the attacks of the hostile Koriaks and Tchuktchis, which rendered the sledge journey extremely dangerous, being thereby avoided.

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Hitherto the attention of the Russians had chiefly been engaged in the investigation of the country lying to the south of Anadyrsk. But the question of the continuity of Asia and America had long been occupying the mind of Peter the Great, who was at that time Czar, and he resolved that an expedition should be undertaken with that aim. Accordingly, with his own hand, he drew up instructions, in which he ordered that ships should be constructed in Kamschatka, that they should direct their course northwards with the object of setting at rest the question of the existence of a strait between the two continents, and that they should endeavour to extend the Russian dominions wherever possible. Before further action had been taken the reign of Peter the Great was terminated by death, but the Empress Catherine, on coming to the throne, at once proceeded to carry out the instructions of the Czar. In 1725 the first expedition started, and Bering

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to examine the shores of the supposed straits as soon as they should be free of ice in the following summer. They left the river for this object on the 5th of June, 1729, but owing to the continued prevalence of strong north-east winds, against which the *Gabriel* could make no headway, the main idea of the voyage was abandoned, and Bering made for Okhotsk, whence he proceeded overland to St. Petersburg. His second voyage was thus neither successful nor disastrous. The third, and final one, was both.

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It was during the absence of Bering that an event occurred which, but for a fortunate accident, would in all probability have resulted in the murder of every Russian in Kamschatka. The natives had for a long time cherished the idea of ridding themselves of their conquerors by a preconcerted rising throughout the country. In 1731 a more favourable opportunity presented itself than they could have anticipated. The departure of Bering and his people had cleared the Kamschatka of the most formidable body of their enemies, and the Russian forces in the peninsula had been still further weakened by the absence of a great number of Cossacks, who, under Captain Paulutsky, had been sent to the north to suppress a rebellion of the Tchuktchis. At the same time the commissary Shacurdin sailed from the Kamschatka River for Anadyrsk in charge of the annual tribute. The moment was seized by the Kamschatdales, who throughout the country were in readiness for the revolt. They sailed up the river, killing every Cossack they encountered, and Nischni Kamschatka was carried in the night by surprise. Every soul was massacred, with the exception of two or three who made their escape under cover of the darkness, and paddling down the river, eventually reached the coast. Here, to their great joy, they found the two vessels which had left for Anadyrsk, but had been compelled to return by strong head winds. Measures were immediately taken to regain possession of the fort. The leaders of the rebellion were Harchin —a Toyune or chief of the Yelofka River district—and a Kluchi Kamschatdale named Chugotchi. The village of Nischni had fallen

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to Harchin's forces, and Chugotchi, having murdered all the Russians in his own district, marched to join him. Hearing of the return of Shacurdin's ships, they entrenched themselves in the fort and awaited the Russian attack. It would have been better for them had they accepted the terms offered by their opponents, but they refused to surrender. The place was retaken with great slaughter. Hardly a man escaped alive, and thus the revolt, which at one time bid fair to spread throughout the peninsula, was checked almost at its outset. It was the last struggle engaged in by the natives, and thenceforward the country remained in a condition of uninterrupted peace.

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It was not until 1732 that proposals were made for the despatch of another exploring expedition to the far east. They emanated from Bering himself, who, with his two lieutenants Spangberg and Tschirikov, was anxious to push across to the American coast, and trace it northward to the strait that now bears his name. Another point too remained to be elucidated. To the south-east of Kamschatka in the charts of Delisle and others of that day an appearance of land was indicated, and described "*Terre vue par Jean de Gama, Indien, en allant de la Chine à la nouvelle Espagne.*" It was intended to search for this mythical land before proceeding to America,—an intention that, unluckily for the fate of the explorer and his comrades, was ultimately carried out,—and emboldened by the success of his earlier voyages, Bering ventured to lay his proposals before the Empress.

They were at once acceded to, and Anne, who appears to have been as anxious to extend the dominions of Russia as her predecessor, resolved upon a simultaneous system of exploration over a vast extent of country. Special attention was to be directed to the possibilities of a north-east passage along the coasts of the Polar Sea. Eight additional lieutenants were appointed, of whom three were to be engaged in this work. Spangberg was to proceed to Okhotsk, where two ships were to be built to enable him to reach Japan, while the two needed for Bering's voyage were also to be

29:Cochrane T-2 (1821-22) 1824 Kamchadal

162 ing degree is a question I shall not answer, farther than by reminding my readers that at the discovery of Kamtchatka, we are told in the Russian history, that no less than one hundred and sixteen villages
164 were on the banks of the river Kamtchatka. The
162 small-pox, and its rival distemper, with other diseases, and above all the spirit of persecution which has been unremittingly practised towards these poor people, have been the several causes of the depopulation. Of late, however, I can with certainty say the population has not decreased; this may be owing to the benefits arising from vaccination, as well as somewhat better medical attend-
162 ants. But although population has of late kept its
563 maximum, it may be a question whether the aborigines have not decreased in the same ratio that the Russians and convicts have increased. At present there are several Yakut as well as Russian exiles, in the peninsula, neither of whom can be of much benefit; but both assisting to persecute and plunder the Kamtchatdales.

175 Of the history and origin of the Kamtchatdales little positive has ever been known; and that only for the last one hundred and thirty years. Kamtchatka is supposed to have been visited by some Russians in 1649, when one of the traveller Deshneff's vessels, was wrecked on its coast. Those Russians lived with them in peace for a considerable period of time; but quarrelling among themselves were murdered. Nothing more is known of the place

29:Cochrane T-2 (1821-22) 1824 Kamchadal

175 until Vladimir Atlassof discovered the peninsula in his excursions from the Anadyr, from which time a constant petty warfare continued between the Russians and natives, until the general revolt and massacre in 1731. Since this period, the peninsula has not been greatly troubled with either
171 conspiracies or massacres. Little doubt can exist
177 that the Kamtchatdales are of Asiatic origin; of
181 this, their features and customs, as well as their dwarfish size, are evident tokens. I have read several dissertations upon the subject, but disagree with most of them. My own opinion is formed from ocular demonstration alone, and not from a study of the circumstances under which they labour. Their having progressed from America is indeed a ridiculous idea; and their having learnt many secrets, as causing fire by friction, &c. from the inhabitants of the opposite continent, is just as probable as the other sagacious notions, that they were the teachers. How, in either case, could they pass that formerly ferocious and warlike race, the Tchuktchi? Or if they had come from the north of Siberia, from Irkutsk or Yakutsk by Okotsk, and Idgiga, how did they pass the still more fierce and barbarous Koriaks? The idea is absurd; and the only one I can for a moment entertain is, that they are a Mongole tribe, who were driven down the Amoor, and passing along the Kurile Isles, reached Kamtchatka. A few of the same race are still the inhabitants of those isles,

2: Schrenck--268 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu A86
Kamchadal RY3

K 175 131 167 A 175 /127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

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2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101] Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

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with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

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6. (cont.)
Islands south of Onekotan, Krascheninnikof gives a faithful translation of Müller's remarks, but for the northern ones, as well as for southern Kamchatka, he ignores them completely, since here he was able to rely upon his own experiences and observations, as well as Steller's. Later (Samml. Russ. Gesch., Vol. III, 1758 p. 79), Müller agreed with the assertions by Steller and Krascheninnikof and declared that it was nothing but "common usage" among the Russians on Kamchatka to call the inhabitants of the first island and of the mainland to the south of Bolscherezk "Kuriles," whereas they were nothing but Kamchadal with a different language dialectally.

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And they carried the same designation, in adjectival form, over to many localities in southern Kamchatka, as is shown by the names Kurilskoje /128/ osero, Kurilskij Ostrog located on an island in the lake named, Kurilskaja Lopatka, etc.

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As for the origin of the name "Kuriles" for the Ainu on the island chain to the south of Kamchatka, among the Russian writers since the days of Golownin it became, I might almost say, a custom to derive the name of the people from that of the islands, and the latter from their smoking volcanoes (kuryashchiyasya sopki) (1). Steller, however, has already

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1. Golovnina, Zap. o prikliuch. ego v" plienu u Iapontsev", v" 1811, 1812 i 1813 g., Pt. III, St. Petersburg, 1816, p. 158; A. Sgibnev", "Bunt" Ben'evskago v" Kamch. v" 1771 g. /The Revolt of Ben'evskii in Kamchatka in 1771/" Russk.

2: Schrenck--271 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu AB6
Kamchadal RY3

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1. (cont.)
Starina, 1876, March, p. 534). Polonskij ("Kurily."-- Zap. Geogr. Obshch. Po Otd. Etnogr., Vol. IV, 1871, p. 369) went even a step further in that he thought that the name derived from the smoking volcanoes were all the more likely preserved since to the approaching mariner these islands emerged out of the fog in which they were almost constantly wrapped, and thus seemed to be smoking themselves. This derivation of the name "Kuriles" is also repeated in Bickmore's article on the Ainu (Amer. Journ. of Science, May, 1868, p. 18). As an oddity I might give Tronson's assertion that the name Kuriles for the islands came from a lake of the same name (Kurilskoje osero) located in the south of Kamchatka, whose inhabitants had most likely emigrated to the islands (Tronson, Pers. Narrat. of a Voyage to Japan, Kamtsch., Siberia, Tartary, etc. in H. M. S. Barracouta, London, 1859, p. 158).

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Steller, however, has already pointed out that the name Kuriles customary among the Russians for the inhabitants of the like-named islands was connected with the name that the Italmen from Bolschaja reka to Lopatka give to this people and which sounds like "Kuschi" or "Kusi" (2).

2. Steller, op. cit., pp. 6, 7, 30.

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He himself, however, erroneously derives this latter name from a special way of dancing customary among this people, that "Kuschi" would mean something like "dancing" or "jumping" (3).

3. Steller, op cit., p. 248, note a.

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

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/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

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1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachtschirsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

G /353 cont./
352 running under it and therefore is better suited for the feet than
354 for the head. There is another justification for this custom in
513 the winter houses of the Amur peoples. If one lies with his
516 head against the wall, he exposes himself so that the rats,
171 which are exceedingly abundant in these houses and which al-
[136] ways run along the walls, would be constantly running over the
G face. This alone, however, would not make the Gilyak refuse
[184] to allow even a stranger to assume this position on their kang,
[199] if superstition did not demand strict observance of the tradi-
tional custom, and afraid of any violation of it, no matter by
G whom, as misfortune for all the inhabitants of the house.
342 Due to the lack of historical data, it cannot be deter-
171 mined when the Chinese winter-yurt reached the Gilyak on the
Amur and, gradually spreading downstream, supplanting the
earth yurt, reached the Amur-Liman, the coast of the Sea of
G Okhotsk, and the Liman coast of Sakhalin. In the reports of
[175] Pojarkof and Nagiba, who spent the winter among the Gilyak
at the mouth of the Amur and along the Sea of Okhotsk in 1644-
45 and 1652 (3), there are, unfortunately, no hints which would

3. See pp. 216, 219 ff. above.

K permit conclusions about the nature of the Gilyak houses at that
342 time. In the case of another Paleo-Asiatic people, the Kam-
179 chadal, we see the original earth-yurt completely disappear
175 before an imported, foreign type of house construction within
the short space of about 50 years. At the time of Krascheninnikof
and Steller (in the forties of the previous century), all the
Kamchadal still lived in earth yurts of the type described above.
Even in 1779, when Clerke, the successor of Cook on the latter's
third voyage, visited Kamchatka, at least the south of the
peninsula, between Peter-and-Paul's Harbor and Bolscherezk (4).

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4. Tagebuch einer Entdeckungsreise nach der Südsee in den Jahren 1776-1780 unter Anführ. der Capitäne Cook, Clerke, Gore und King, transl. by J.R.Forster, Berlin, 1781, p. 333.

/353 cont./

K 342 175 177 Shortly thereafter, however, in 1790, Ssarytschof reported /354/ from his journey through the country that there were no longer any earth yurts anywhere and that instead of them Russian-style houses (log houses, so-called isba) had been built everywhere; only the summer dwellings of the Kamchadal, which are likewise peculiar, had been retained (1). On the basis of a remark by

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1. Sarychev", Putesh. po Sieverovost. chasti Sibiri, Pt. I, p. 179.

Mamia Rinsô on his voyage in 1809 from Deren down the Amur, one might think at first glance that the same thing had happened among the Gilyak on the Amur. Coming from the territory of the S'janta (Olcha), when he entered the territory of the Smerenkur (Gilyak) at Horo (Chjare), he noticed that from there on people, dwellings, implements, and way of life changed and became exactly the same as on Krafto (Sakhalin) (2). One might

2. Siebold (Nippon, VII, p. 177). Cf. also p. 248 above.

think, therefore, that at that time the Gilyak on the Amur were still living in earth yurts as on Sakhalin. But this is impossible, for, as mentioned above (p. 466), four years earlier Krusenstern had found Chinese winter-yurts among the Gilyak on the northern tip of Sakhalin, that is, at the farthermost point, as far as these dwellings are found even today. If, in addition, one considers the fact that Mamia Rinsô was traveling in summer, there can be no doubt but that his above remark referred to the summer dwellings, which in fact, as we shall see in a moment, are quite different among the Gilyak on the Amur and on Sakhalin than among their neighbors, the Olcha, and the other Tungusic Amur-peoples. Conditions in Kamchatka and in the lower Amur region were too different to have produced an equally rapid disappearance of national peculiarities in both places. In the former, the Russians, after conquering the region, settled

K 342 177 G [342] [177] K [648]

G /358 cont./
343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

G /359/ Like the earth yurt, all the pile buildings men-
342 tioned above, the summer yurt, the storehouse, etc., are original,
343 peculiarly Gilyak structures which the neighbors of the Gilyak,
171 the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to
K [175] Krascheninnikof's and Steller's descriptions and an illustration
[342] given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan
000 by the Russians (1). The Eskimo of the American Northwest along

K [113]

1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

K [132]

K [178] [179]

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way. 133 123 782 777

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh- 133 137 372 313 342 [101] 127 439

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177/439 ed: thoſe of the remote iſlands brought to them all ſorts of lackered wooden ware, ſcymitars, ſilver rings which they wear in their ears, and cotton ſtuffs; and from them in return, they uſed to take chiefly, eagles' feathers, which are uſed in ornamenting their arrows: this ſeems very probable; for I had from this iſland a lackered waiter, a baſon, a *Japaneſe* ſcythe, and a ſilver ring; all which I have ſent to the *Imperial* Chamber of curioſities. Theſe articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this iſland[1] have their habitations near the ſouth-weſt point, upon a lake five verſts in circumference, out of which a ſmall rivulet, called *Petpu*, runs into the ſea.

133 Both theſe iſlands are ſubject to frequent and terrible earthquakes, and inundations: one of theſe calamities happened in the year 1737, about the time of my coming to *Kamtſchatka*; and another in *November*, 1742. We ſhall relate the firſt circumſtantially in its proper place; but as for the ſecond, though it was great, yet I have not been informed of the miſchief and deſtruction it occaſioned; for it happened after my departure from *Kamtſchatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* iſland is called *Sirinki*, and lies ſouth-weſt of *Paromuſir*. The fourth iſland is called *Onnecutan*. This iſland is leſs than *Paromuſir*, and lies from north-eaſt to ſouth-weſt, as that does, from which they row to it in one day.

101/651 It has many inhabitants of the ſame origin with the *Kuriles* of *Paromuſir* iſland, as was ſaid before, out of which ſome families go over to viſit the inhabitants of *Paromuſir*, and voluntarily pay a tribute in beavers and foxes. The author concludes from this, that the reſt of theſe iſlands would not refuſe to pay the tribute, if proper perſons were ſent to bring them under ſubjection; and give them aſſurances, by kind

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1 [Parmushir]

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is absolutely necessary. The *Russians* were no sooner settled there, than 177
they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. The stem is fleshy, of three or four 137
joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inhabitants gather and prepare it in this manner: they cut off the 222
stalks of the leaves which grow nearest the root, and with a shell 252

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

CHAP. VI.

Of the LAND ANIMALS.

136

THE principal riches of *Kamtſchatka* conſiſt in the great number of wild beaſts: among which are foxes, ſables, ſtone foxes, hares, marmottas, ermins, weaſels, wolves, rein-deer wild and tame, and ſtone rams. Their fox ſkins in the thickneſs, length, and beauty of their hair equal, if not excel, all the foxes of *Siberia*; beſides there are in *Kamtſchatka* almoſt all the different ſpecies of foxes which are to be found in other places, ſuch as the red, fiery, blue-breaſted, or marked with a black croſs, the cheſnut, black cheſnut, and the like; and ſometimes white foxes are found there, but theſe very ſeldom. It is remarkable, that the more valuable 224 foxes are the moſt cunning; ſuch are the black cheſnut, the 177 blue-breaſted, and the fiery coloured; ſo that not only the *Kamtſchadales*, but even the *Ruſſians* find it difficult to catch them. It happened while I was at *Kamtſchatka*, that the Coſſacks tried for two winters to catch one black fox which frequented the Great River, without being able to effect it. The moſt uſual method of taking them is either by poiſon, traps, or bows. The poiſon is thrown in lumps in the freſh tracts; the traps are ſet upon the ſides of hills, baited with a live animal; and for the greater ſecurity two or three of the traps are placed upon one hillock, that whatever way the foxes approach they may fall into one of them; and this is found neceſſary, for thoſe, which have been once in danger from the ſtroke of this trap, proceed afterwards ſo cautiouſly, that they eat the bait without being ſeiſed; but, with all their cunning, it is difficult for them to eſcape the

ſeveral

224 ſeveral traps, which ſeize them ſometimes by the head, and ſome-
177 times by the foot. The method of killing them with the bow is thus: the hunters muſt know exactly how high to place it; when the bow is bent, it is faſtened to a ſtake driven into the earth near which the fox's tract is obſerved, and then a cord drawn from the bow-ſtring, is ſtretched very tight over his ordinary path; and ſo ſoon as this cord is touched with the foot of the fox, the bow is diſcharged, and the arrow pierces the very heart. Theſe are the inventions of the *Ruſſian* Coſſacks; for formerly the *Kamtſchadales* gave themſelves no trouble about the foxes, not valuing their furrs much more than dogs' ſkins. They pretend they could have killed as many as they wanted with ſticks, and that foxes were formerly ſo numerous in *Kamtſchatka*, that when they fed their dogs, they were obliged to
136 drive them away from the trough: and though this may ſeem
224 improbable, yet it is certain, that even now they are in great plenty near the forts, which at night they enter without any ſeeming apprehenſion of danger from the dogs of the country, which either cannot catch them, or, not being bred to it, do not mind them. It happened when I was there, that one of the inhabitants catched ſeveral of them in the pit where they keep their fiſh. The beſt time to hunt foxes is, when the earth is hard frozen, before the ſnow falls, as it is then difficult for them to dig out the rats' neſts, which they do when the earth is thawed, the rats
224 being their chief ſupport. The *Kuriles*, who live upon the
286 *Lopatka*, catch foxes in a manner peculiar to themſelves. They have a net made of the hair of whales' beards, compoſed of ſeveral rings; this is ſpread upon the ground, and to a ring in the middle they bind a magpye; round the net is drawn a cord, the ends of which are held by a perſon concealed in a pit near at hand, who, when the fox ſprings upon the bird, draws the cord and gathers together the net, which ſurrounds the fox as the drag net does a fiſh.

The

101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

both in their language and cuſtoms, yet we have reaſon to believe 101
they are the ſame people; the difference only ariſing from their 177
neighbourhood, and intermarriages with the true *Kuriles*. 184

The *Kamtſchádales* have this particular cuſtom, that they endeavour to give every thing a name in their language which may 192
expreſs the property of it; but if they don't underſtand the thing quite well themſelves, then they take a name from ſome foreign language, which perhaps has no relation to the thing itſelf: as, for example, they call a prieſt *Bogbog*, becauſe probably they hear him uſe the word *Bogbog*, God; bread they call *Brightatin Augſh*, that is, *Ruſſian* root; and thus of ſeveral other words to which their language is a ſtranger.

The names which the *Ruſſians* give theſe different nations they 181
did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtſchadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language ſignifies a rein-deer; and that the *Ruſſian* Coſſacks frequently hearing the word *Kora*, or obſerving that their whole riches conſiſted in rein-deer, gave them the name of *Koreki*.

The inhabitants of *Kamtſchatka* have three languages, that 197
of the *Kamtſchadales*, the *Koreki*, and *Kuriles*; each of which is 177
divided into different dialects. The *Kamtſchatka* language has three principal dialects: the firſt is uſed by the northern, the ſecond by the ſouthern, which differ ſo much that one may look upon them as different languages; however they can underſtand one another without any interpreter: the third dialect is that which is ſpoken by thoſe who live upon the *Penſchinſka* ſea, between the rivers *Vorovſkaya* and *Tighil*, which is compoſed of both the above-mentioned dialects and ſome words taken from the *Koreki*.

578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 Although their manner of living be most nasty, and their
177 actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 In every *Ostrog*, or large village, by order of her Imperial
794 Majesty, is appointed a chief who is sole judge in all causes, ex-
871 cept those of life and death; and not only these chiefs, but even
R the common people, have their chapels for publick worship.
177 Schools are also erected in almost every village to which the
622 *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to
— let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
415 they are ingenious enough to make ſpears and arrows out of the
R. iron pots and kettles which they buy; and they are ſo dextrous
177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
489 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
172 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrowoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-skin;
what comes round the legs is of dreſſed leather or dyed ſeal-
ſkins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

302 they came to be Christians they were with difficulty prevailed
172 upon to quit this dress for one more decent: however, at present
291 round the *Russ* settlements all is intirely changed, the women wearing shirts, ruffles, waistcoats, caps and ribbands; which change nobody now complains of, except the very old people. The women do all their work in mittins: they formerly never washed their faces, but now they use both white and red paint; for white paint they make use of a rotten wood, and for red a sea plant *, which they boil in seals' fat, and rubbing their cheeks with it make them very red. They dress most in the winter time, especially when they either receive or pay visits.

435 The common cloaths for a *Kamtschadale* and his family will not cost him less than an hundred rubles, for the coarsest worsted stockings, which cost in *Russia* 20 kopeeks, cannot be bought here for less than a ruble; and all other things are sold in the same proportion. The *Kuriles* are more able to buy good cloaths than the *Kamtschadales*, for they can purchase for one sea beaver as much as the *Kamtschadales* can for twenty foxes, and one beaver costs the *Kuriles* no more trouble than five foxes do the *Kamtschadales*; for he must be a good hunter who catches more than ten foxes in the winter, and a *Kurili* thinks himself unlucky if he doth not catch three beavers in the season; besides which great numbers are thrown upon the shore by storms,

* Fucus marinus abietis forma. Pinus maritima, seu fucus teres. Dodd. Append. 326. Ray Linn.

CHAP.

better; the *Jakutski* alſo dig deep pits, in which they lay their fiſh, ſprinkling it with wood aſhes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their troughs, with ſeveral different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink but water: but when they made merry they drank water which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves frequently by throwing handfuls of ſnow into their mouths; and the bridegrooms who work with the fathers of their future brides find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 515
by turns. Sometimes he keeps them all in one hut, and ſome- 431
times they live in different huts. With every maid that he mar- 385
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

decoction of the pentaphylladis fruticosus, and that not without success. To wounds they apply the bark of the cedar, and with this they pretend they can even extract arrows.

In costiveness they likewise drink the broth of their stinking fish, and in fluxes they eat lac lunæ, which is very common in this country. For the same distemper they likewise use meadow-sweet and tormentilla root.

Those who have sore throats use a decoction of the epilobium, which is also used by women in hard labours. When they are bit by a dog, or wolf, they lay the bruised leaves of the ulmaria upon the wound, drinking at the same time a decoction of them: this decoction they also admininister in the belly-ach and scurvy. The leaves and stalks bruised they use in burns. The decoction of this herb mixed with fish they use also in the tooth-ach; they hold it warm in their mouths, and lay a piece of the root upon the affected tooth. They use a species of gentian in the scurvy, and almost against every disorder. In the *French* disease they apply the chamaenchododendros, but seldom to any advantage: in fluxes they use the quercus marina: in swellings of the legs and scurvy, they drink a decoction of the dryas; and procure sleep by eating the seed of the ephedra. They foment their eyes with a decoction of seramus.

The inhabitants of the *Lopatka* use clysters, which probably they learned from the *Kuriles*: they prepare them from a decoction of different herbs, sometimes with fat and sometimes without: this they put into a seal's bladder, fastening to it any pipe which they can procure, and apply it in the common way: this medicine is in high esteem among them, and used in most distempers.

In the jaundice, they have a medicine, which they look upon as infallible. They take the roots of the iris sylvestris, and after cleaning them, beat them in warm water, and apply the juice, which they squeeze out, as a clyster, continuing it for

563 to confist in this, that the Coffacks live in houfes, and the natives in huts under ground; the Coffacks ufually eat their fifh boiled, and the natives moftly dry; befides, the Coffacks drefs their's feveral ways different from the natives. As it is impoffible for people to live there without the help of women, who are fo neceffary in many parts of their work, fuch as cleaning their fifh, drying their roots, fpinning and making their fhirts and cloaths, and as the Coffacks firft fettled in *Kamtfchatka* without their wives, whom upon account of the difficulty of the journey they could not tranfport thither, I fhall now relate what methods they ufed to make up for this deficiency.

144 One may eafily imagine, that the Coffacks did not reduce thefe
563 people without ufing force; and in thefe wars they took pri-
177 foners many women and children as well as men, and obliged
567 them to perform all the labour. The care of overlooking thefe fervants was entrufted to fuch as they made their concubines, whom they frequently married if they had any children by them; and fometimes the natives offered them their daughters, whom they promifed to marry as foon as the prieft arrived: fo that it fometimes happened that the Coffacks had a marriage and chriftening at the fame time; for then there was but one prieft in all *Kamtfchatka*, who lived in the lower fort, and once in a year, or once in two years, vifited the other fettlements.

563 The Coffacks, a people rude enough themfelves, feemed to be
567 pretty well pleafed with the manner of living here, ufing the natives as their flaves, who furnifhed them with fables and other furrs in abundance, and paffing the greateft part of their time in playing at cards: their only want feemed to be that of brandy. Before there were any brandy fhops they ufed to meet in the office where the tax was received: here the gamefters brought their furrs, and, when they had no furrs, even their flaves; and

CHAPTER II

JAPANESE SHIPWRECKS NEAR KAMCHATKA SHORE

●177 195 Restrictive legislation of the Shoguns, concerning Japanese navigation, tended to keep Japanese boats in home waters, but storms of the rough Japanese Sea often brought them to Kamchatka.

About the end of the seventeenth century one Japanese junk, after losing its mast in a storm, for six months was carried about by the currents until it was thrown up on the western shore of the Kamchatka Peninsula, not far from the mouth of the Opala River. Of the twelve Japanese who were in the junk, three were taken prisoners by the Kamchadal and nine succeeded in escaping in their junk in an unknown direction. Two of the three prisoners soon died from the Kamchadal diet, to which they could not become accustomed. The name of the Japanese who lived was Denbei. The Cossack chief Atlassoff, during his campaign in Kamchatka of 1697–1699, learned from the Kamchadal of their Japanese prisoner. He took him to Anadyr, and in 1701 he was brought to Moscow, and in January 1702 he was presented to Peter the Great. Denbei was the first Japanese who reached Russia and from him the Czar got his first information of Japan. At the order of the Czar, Denbei taught some Russians the Japanese language. The Czar promised to let him go home, but did not keep his word. Denbei was ordered to be baptised and received the name of Gabriel.

In 1710 another Japanese junk was wrecked on Kamchatka's shore to the north of Avacha Bay. There were ten Japanese, four of whom were killed by the Kamchadal and six taken prisoners. Some were taken from the Kamchadal by the Russian conquerors and kept in their fortresses where they were taught Russian. One of the prisoners, Sanime by name, was brought to St. Petersburg in 1714.

In July 1729 a third Japanese vessel was brought to Kamchatka, somewhere between Lopatka and Avacha, having on board 17 Japanese. It was a trading vessel which carried goods from Satsuma to Osaka. Soon after landing the Japanese were discovered by the Cossack chief, A. Stinnikov, and the Kamchadal accompanying him. At first the Japanese were well treated. When the Japanese saw that Stinnikov was plundering goods from their wrecked vessel, they tried to escape in a small boat, but Stinnikov ordered his Kamchadal to overtake and kill the Japanese. A part of them were killed by arrows, lances or sabers, obtained from the Japanese themselves. Some of them were drowned. Only two remained alive—a wounded boy, Gonza, and an adult Japanese, Soza, who were dragged from the water. When the news of the Japanese massacre reached the higher authorities an order was given to arrest Stinnikov, and he was hanged for his crime. Gonza and Soza were sent to European Russia. In 1734 they reached

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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175

St. Petersburg and were presented to the Empress Anna Ioanovna. In the same year they were baptized; Gonza was named Damian Pomortzev, and Soza, Kosma Shultz. They were charged to teach Japanese to the students of the Academy of Sciences. Neither lived long—Soza died in 1736 at the age of 43 and Gonza in 1739, being only 21.

Some years later (1745) other Japanese wrecked at Kamchatka's shore were brought to St. Petersburg for the same purpose, but the Japanese were simple fishers and hardly could be used as teachers.[1] Such wreckages of Japanese ships repeatedly took place about that time. The explorer Lesseps mentions nine Japanese whose ships were wrecked at the Aleutian Islands in 1788 and whom he brought to Kamchatka.[2]

THE UPRISING OF THE KAMCHADAL

THE CAUSES OF REVOLTS

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669
R.
177.66

The causes of revolts of the Kamchadal were the cruelty, violence, greediness with reference to fur-skins, and the licentiousness of the Cossack chiefs and soldiers on the peninsula. On the other hand frequent mutinies of Cossacks against their chiefs and the incessant feuds between the chiefs and their parties could not inspire respect from the oppressed natives. Numerous local revolts had taken place from the very beginning of the occupation of the country by the Cossacks. Rebels and victors were equally merciless in their encounters. A general uprising of the Kamchadal which had been fomenting for a long time broke out in 1731. The Kamchadal were ready to rise before that date but did not dare to do so.

In 1729 Kamchatka was visited by the first scientific expedition of Bering and his companions who had armed crews. The ship *Gabriel*, with a crew of one hundred men belonging to the military expedition of the Cossack chief, Afanassy Shestakoff, remained in Nishne-Kamchatsk until July 1731. According to the original plan of Shestakoff's military expedition, the *Gabriel*, after leaving Okhotsk, was to visit Kamchatka and to proceed from there to the mouth of the Alutor River, where the commander of the expedition, Shestakoff, expected to arrive by land from the shore of the Okhotsk Sea, in order to subdue the Alutor Koryak; from there it was intended that the ship should sail to the mouth of the Anadyr River, exploring the shores on the way, and continue up the river to the fortification at Anadyrsk, which Shestakoff intended to reach by land. But Shestakoff's party was defeated and he himself killed by the Koryak after he had crossed the Paren River. When the news of Shestakoff's death arrived, the *Gabriel* remained in Kamchatka, awaiting further orders. In June 1731 she was ordered to proceed to the Anadyr and to enter the service of Pavlutsky, Shestakoff's lieutenant.

As soon as the *Gabriel* had weighed anchor and gained the open sea, the Kamchadal attacked the fortress Nishne-Kamchatsk and took possession of it. Presently a detachment was despatched to take Verkhne-Kamchatsk and Bol-

[1] W. W. Barthold, *Die geographische und historische Erforschung des Orients mit besonderer Berücksichtigung der Russischen Arbeiten*, Leipzig, 1913, p. 136.
[2] M. de Lesseps, *Travels in Kamchatka*, English Translation from French, vol. 1, London, p. 308.

669 761 was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

157 177 181 The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

651 R. 177.65 The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 287.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

● 177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnôye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and salteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
● 177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

132 From this table it is seen that the climate of Tighil is much colder than that of Petropavlovsk and that the climate of Kluchevskoye, by its yearly and some of its monthly mean temperatures, is colder than that of Petropavlovsk, but by its summer temperature (May, June and July) it is warmer than that of Petropavlovsk.

Temperature of the soil. Monthly means, 1909.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Amplitude
Petropavlovsk:													
(1)	−10°5	−10°6	− 7°3	−0°5	8°8	14°5	17°6	15°6	10°9	.....	−4°7	−10°5	26°2
(2)	0.6	0.4	0.3	0.1	4.9	0.3	.....	13.4	10.9	.....	1.9	0.9	13.3
(3)	1.9	1.6	1.4	0.9	3.1	6.5	.....	12.1	10.4	.....	3.6	2.4	11.2
(4)	3.8	3.4	3.0	2.6	1.6	2.7	.....	6.8	7.1	.....	5.2	4.4	5.5
Kluchevskoye:													
(1)	−15.1	−17.3	−12.2	−2.4	10.2	15.6	19.3	15.9	.....	.....	−8.3	−19.3	38.6
(2)	− 9.5	−10.3	− 7.8	−3.1	3.5	9.3	12.8	12.4	.....	.....	−3.0	−10.4	23.2
(3)	− 1.2	− 2.6	− 2.8	−2.2	−0.8	0.0	2.0	4.0	.....	.....	1.7	0.1	6.8
(4)	1.4	1.0	0.7	0.5	0.4	0.4	0.4	0.4	.....	.....	2.7	2.1	2.3
Tighil:													
(1)	−18.3	−20.3	−14.0	−2.8	6.8	13.0	15.7	12.3	8.4	1.7	−6.1	−13.6	36.6
(2)	−11.9	−14.7	−12.0	−3.9	1.6	6.9	10.6	10.7	8.1	2.7	0.8	0.4	25.4
(3)	− 3.1	− 6.2	− 6.9	−4.4	−0.3	0.0	1.1	4.0	5.1	3.0	0.9	0.3	12.0
(4)	0.4	0.0	− 0.3	−0.9	−0.6	−0.2	−0.2	−0.2	0.0	0.3	0.3	0.2	1.2

(1) means on the surface; (2) means 0.35 meter deep; (3) means 1.0 meter deep; (4) means 2.0 meter deep.

This table is compiled from the numerous data on this subject by Vlasov, in order to show what time of the year may be regarded as the most favorable for making excavations in Kamchatka. In Petropavlovsk from May to September inclusive; in Kluchevskoye from July to September; in Tighil in August and September, and even in these two months we meet the freezing point at the depth of two meters. My own experience in that region gave still less favorable results. While digging on June 11 on the bank of Kulki River, a tributary of Tighil River, not far from the village Tighil, I met frozen soil at the depth of one foot and down. According to Vlasov only at the depth of more than 1 meter (3.28 feet) is the soil in Tighil frozen in that month.

SOMATOLOGY

144 The present Kamchadal have become mixed with Russian settlers and many
● 177 have lost their former Koryak-like appearance, even in places where officially no Russians are recorded. The same may be said of the inhabitants of the southern villages, Yavino and Golyghino, who in former times might have been physically influenced by the Kurilians (i. e., the Northern Ainos). The Kurilians had intercourse with the Southern Kamchadal, and some Kurilians had settlements on the southern extremity of the Kamchatka Peninsula.

141 The measurements of Kamchadal taken by Mrs. Jochelson show that the Russian metisation influenced very little the physical character of the Kamchadal. 158 men and 170 women were measured. The following table gives some of the measurements and indices.

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	5.4	1,495 mm.	4.6
Length of head	158 mm.	6.8	153 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 These observations refer to the year 1911 and it would be fair to relate observations of later years.

177 Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding,
177 agriculture, etc.) show a marked increase in population. But these groups do not
609 include the Kamchadal. On the other hand the latest investigators of Kamchatka, the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Valrens, Renen und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–180. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 49–52 (in Russian).

1. [i.e., a decline in population due to Syphilis, etc. --Analyst]

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

114 177 439 172 325

In the beginning of the seventeenth century the Japanese Government prohibited all navigation beyond its home waters, and before the Russians conquered Kamchatka the Kamchadal were not acquainted with the use of metals. However, there is no doubt that some iron instruments and other Japanese goods had reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

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It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.

[2] According to Krashenninikoff (vol. ii, p. 49, in Russian) the Kamchadal called a needle "shish" and the Japanese as pronounce of needles "shishamas."

[Pp. 22 - 36 have not been included in the file --Analyst]

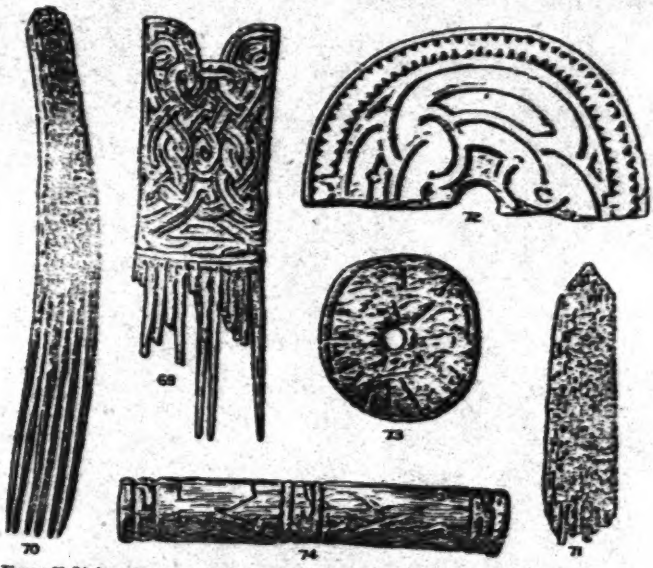
000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

177 From the remnants of objects of Japanese culture no inference can be made as
325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as
554 coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka
172 at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

According to Steller (p. 320), the Kamchadal paid homage to pieces of iron obtained from the Kurilians. The iron was set up on a pole in front of the dwelling as proof of the wealth and special importance of its owner. Krasheninnikoff also states (II, p. 97) that every Kamchadal possessing a fragment of iron was deemed rich and lucky.

● 177 The Kamchadal, now Russianized, no longer live in subterranean houses,
342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
823 We may only surmise the reasons for such a diversity. We know that many of

000 We have said before that the Ainos were not acquainted with navigation, coming to the islands on rafts. Later they learned to build clumsy boats from the Japanese—not from the Indonesians, who are expert navigators; neither did they adopt the skin boat from the Chukchee and Koryak. As to shape, their dug-outs and boats do not resemble the canoes of the Kamchadal.



Figures 69–74 show objects found in 1899 by Dr. Tseli in a neolithic site on the island Shumshir.
Fig. 69. Fragment of a bone comb ornamented with interwoven curves, resembling one of the decoration of the Kamchadal bone belt buckle of Plate 16, figure 6.
Fig. 70. Bone comb resembling the Kamchadal comb of Plate 16, figure 9. I am inclined to regard them both as implements for making decorative parallel lines when the clay is still wet. It may be that they served both objects: as hair combs and implements for decoration of pottery.
Fig. 71. Fragment of a bone comb with broken-off teeth.
Fig. 72. Half of bone belt buckle. The decorating interwoven curves are much larger than on the preceding buckles, both Kamchadal and Kurilian. Five drilled holes along the broken edge were intended, as it seems, to bind together the two broken halves.
Fig. 73. Bone buckle of smaller size, ornamented by irregular circles and straight lines.
Fig. 74. Bone case for fishing hooks.

● 177 While the Ainos had adopted nothing from the East-Siberian tribes as far
854 as concerns navigation, they made some cultural acquisitions from the Kamchadal or were influenced by them in some respects. The Kurilians weave grass baskets of the same kind and material and in the same manner as the Kamchadal do. The same is true of wooden utensils. On the other hand the Kamchadal adopted from the Kurilians the mode of manufacture of bone combs, belt buckles and ornamental motives. The Aino as well as the Kamchadal women use the head-band for carrying children on the back.[1]

1. [For additional culture traits shared by the Ainu and Kamchadal see category 171--Analyst]

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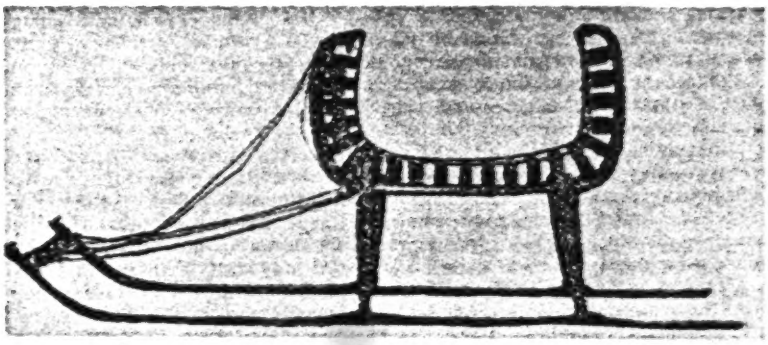

18th-century dogsled.

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[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

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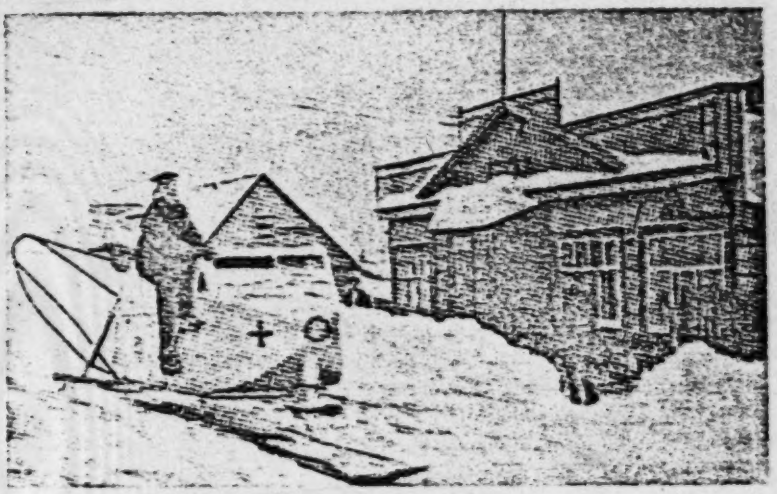
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3



Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
ever, the milk yield was very low, and livestock mortality was high.

[493] From the Russians, the Itel'mens obtained improved means of pro-
175 duction: firearms, nets, etc. Stone and bone implements were completely
177 abandoned in favor of metal ones. Russian clothing and utensils began to
648 come into use. The primitive semidugout was gradually (and by the begin-
ning of the 19th century, completely) replaced by wooden board dwellings,
and occasionally by log houses of the Russian type. Simultaneously with the
absorption of Russian culture by the Itel'mens, a reverse process was also
taking place in the 18th and 19th centuries. Soldiers, Cossacks and
peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Itel'men women and acquired some
elements of their way of life and culture. The result was that peculiar
population of the peninsula which became known, as we have pointed out
earlier, under the name of Kamchadals and was often mistakenly classified
as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
231 spawning runs caused almost annual failures of the native catch and led to
inevitable famines.

175 Contemporary Life of the Itel'mens
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During the civil war in the Far East, the Itel'mens actively helped the guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

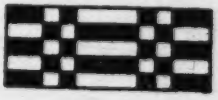
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



7:Lesseps T-3 (1787-88)1790 Kamchadal

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To understand the nature, and estimate the utility of this project, nothing more is necessary

selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

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An English ship, belonging to M. Lanz, a merchant of Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had sailed, in

7:Lesseps T-3 (1787-88)1790 Kamchadal

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neceſſary than to have an idea of the extent and form of the bay of Avatſcha, and the port in queſtion. We have already many accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

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in order to begin its cargo, which it expected to complete at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

7:Lesseps T-3 (1787-88)1790 Kamchadal

Those of winter are less singular; and if equally large, would exactly resemble the habitations of the Russian peasants. These have been so often described, that it is universally known how they are constructed and arranged. The isbas are built of wood; that is to say, the walls are formed by placing long trees horizontally upon one another, and filling up the interstices with clay. The roof slants like our thatched houses, and is covered with coarse grass, or rushes, and frequently with planks. The interior part is divided into two rooms, with a stove placed so as to warm them both, and which serves at the same time as a fire-place for their cookery. On two sides of the largest room, wide benches are fixed, and sometimes a sorry couch made of planks, and covered with bears skin. This is the bed of the chief of the family: and the women, who in this country are the slaves of their husbands, and perform all the

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177/515/757/823 The various conſtructions which M. Kaſloff ordered for the greater convenience of his eſtabliſhment, detained us two days longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of diſ-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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lowed to traffic in this article; but the brandy, diſtilled from corn, which is brought from Okotſk, and that produced by the country, which is diſtilled from the *ſlatkaïa-trava*, or ſweet herb, are ſold, upon government account, at forty one roubles ninety-ſix kopecks* the vedro. They can be ſold only in the *kabacs*, or public houſes, opened for that purpoſe. At Okotſk, the price of brandy diſtilled from corn is no more than eighteen roubles the vedro; ſo that the expence of freight is charged at twenty-three roubles ninety-ſix kopecks, which appears exorbitant, and enables us to form ſome judgment of the accruing profit.

The reſt of the merchandize conſiſts of nankins and other China ſtuffs, together with various commodities of Ruſſian and foreign manufacture, as ribands, handker-

* Nine pounds nine ſhillings.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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177 chiefs, ſtockings, caps, ſhoes, boots, and other articles of European dreſs, which may be regarded as luxuries, compared with the extreme ſimplicity of apparel of the Kamtſchadales. Among the proviſion imported, there are ſugar, tea, a ſmall quantity of coffee, ſome wine, but very little, biſcuits, confections, or dried fruits, as prunes, raiſins, &c. and laſtly, candles, both wax and tallow, powder, ſhot, &c.

The ſcarcity of all theſe articles in ſo diſtant a country, and the need, whether natural or artificial, which there is for them, enable the merchants to ſell them at whatever exorbitant price their voracity may affix. In common, they are diſpoſed of almoſt immediately upon their arrival. The merchants keep ſhops, each of them occupying one of the huts oppoſite the guard-houſe; theſe ſhops are open every day, except feaſt days.

The

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 The inhabitants of Bolcheretſk differ not
291 from the Kamtſcadales in their mode of
563 living; they are leſs ſatisfied, however, with balagans, and their houſes are a little cleaner.

Their clothing is the ſame. The outer garment, which is called *parque*, is like a waggoner's frock, and is made of the ſkins of deer, or other animals, tanned on one ſide. They wear under this long breeches of ſimilar leather, and next the ſkin a very ſhort and tight ſhirt, either of nankin or cotton ſtuff; the women's are of ſilk, which is a luxury among them. Both ſexes wear boots; in ſummer, of goats or dogs ſkins tanned; and in winter, of the ſkins of ſea wolves, or the legs of rein deer*. The men conſtantly wear fur caps; in the mild ſeaſon they put on longer ſhirts of nankin,

439 *Articles of apparel made of the ſkins of rein deer are procured from the Koriacs.

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177 or of ſkin without hair; they are made like
291 the parque, and anſwer the ſame purpoſe,
563 that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 The principal food of theſe people con-
462 ſiſts, as I have already obſerved, in dried
222 fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamt-

ſchadales

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515/157 trary extreme. Notwithſtanding this careleſſneſs, and other natural defects, it muſt be regretted that their number is not more conſiderable; as, from what I have ſeen, and what has been confirmed to me by different perſons, if we would be ſure of finding ſentiments of honour and humanity in this country, it is neceſſary to ſeek for them among the true Kamtſchadales; they have not yet bartered their rude virtues for the poliſhed vices of the Europeans ſent to civilize them.

177/563 It was at Bolcheretſk that I began to perceive the effects of their influence. I ſaw the trace of European manners, leſs in the mixture of blood, in the conformation of features, and the idiom of the inhabitants, than in their inclinations and mode of life, which did not always diſcover any very conſiderable fund of virtue. This ſtriking difference between the inhabitants and

7:Lesseps T-3 (1787-88)1790 Kamchadal

177/563 the indigenes, ſprings, in my opinion, from the difficulties which lie in the road to civilization, and I will aſſign my reaſons.

Bolcheretſk, not long ago, was the chief place of Kamtſchatka, particularly as the governors had thought proper to eſtabliſh their reſidence there. The chiefs and their ſuites introduced European knowledge and manners: theſe, it is known, generally become adulterated in tranſmiſſion, according to the diſtance from the ſource. Meanwhile it is to be preſumed that the Ruſſian government was careful, as far as it was poſſible, to confide its authority and the execution of its orders, only to officers of acknowledged merit, if I may judge from thoſe who are at preſent employed; and it is therefore to be ſuppoſed that theſe officers, in the places of their reſidence, were ſo many examples of the virtues, the acquirements, and all the eſtimable qualities of civilized

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civilized nations. But unfortunately the leſſons which thy gave, were not always ſo efficacious as might have been expected; either becauſe being only ſketches, they were not ſufficiently felt, or rather, not being imbibed in all their purity, they made but momentary or perhaps vicious impreſſions on the mind.

Theſe reformers found not the ſame zeal either in the Coſſacs who compoſed the garriſon, or in the merchants and other Ruſſian emigrants who ſettled in the peninſula. The diſpoſition to licenciouſneſs, and the deſire of gain, which the firſt conquerors of a country almoſt always bring with them, and the continual development of theſe qualities, by the facility with which the natives may be duped, contributed to check the progeſs of reform. The fatal infection was ſtill more diffuſely ſpread by intermarriages, while the ſeed of the ſocial

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177 virtues, which had been attempted to be
563 ſown, ſcarcely found a reception.

The conſequence has been, that the natives, or true Kamtſchadales, have preſerved almoſt univerſally their ignorant ſimplicity and uncultivated manners; and that a part of the reſt of the inhabitants, Ruſſians and mixed breed, who have ſettled themſelves in the oſtrogs where the governors reſide, ſtill retain indeed a faint ſhade of European manners, but not of ſuch as are moſt pure. We have already had a proof of this in what has been ſaid of their commercial principles, and my conviction has been rendered ſtronger during my abode at Bolcheretſk, by a cloſer ſtudy of the inhabitants, who, this faint ſhade excepted, differ little from the indigenes.

157 M. Kaſloff, and thoſe who accompanied
563 him, in imitation of his example, frequently
177 give

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157 563 177 give entertainments or balls to the ladies of this oſtrog, who accept ſuch invitations with equal alacrity and joy. I had an opportunity of ſeeing that what I had been told was true; that theſe women, the Kamtſchadales as well as the Ruſſians, have a ſtrong propenſity to pleaſure; their eagerneſs indeed is ſo great, that they are unable to conceal it. The precoſity of the girls is aſtoniſhing, and ſeems not at all to be affected by the coldneſs of the climate.

177 563 With reſpect to the women of Bolcheretſk, who were preſent at theſe aſſemblies, and who were chiefly either of mixed blood or of Ruſſian parents, their figures in general did not appear diſagreeable, and I perceived ſome who might be conſidered as handſome: but the freſhneſs of youth is not of long duration; from child-bearing, or the painful labours to which they are ſubjected, it fades away almoſt in the flower

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of their age. Their difpofition is extremely cheerful; a little, perhaps, at the expence of decency. They endeavour to amufe the company by every thing which their gaiety and playfulnefs can furnifh. They are fond of finging, and their voice is pleafant and agreeable; it is only to be wifhed that their mufic had lefs refemblance to their foil, and approached nearer to our own. They fpeak both the Ruffian and Kamtfchadale languages, but they all preferve the accent of the latter idiom. I little expected to fee in this part of the world Polifh dances, and ftill lefs country dances in the Englifh tafte; but what was my furprife to find that they had even an idea of a minuet! Whether my abode for twenty fix months upon the fea, had rendered me lefs faftidious, or that the recollections they revived facinated my eyes, thefe dances appeared to be executed with tolerable precifion, and more grace than I could have imagined.

The

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177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
152 ſive. I ſhall finiſh this account with a re-
837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

533 The entertainments and aſſemblies of the
535 native Kamtſchadales, at which I was alſo

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278/825 this induced them to make uſe of it. This animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177/771/793 The Chriſtian religion was introduced into this country by the Ruſſians; but the inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

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177 upon the clergy, whoſe buſineſs it is to en-
771 lighten their ignorance. But are theſe cle-
793 rical miſſionaries ſufficiently informed them-
ſelves? They have no opportunity it muſt be acknowledged for profound ſtudy, and probably it is not required of them, as it is common enough to ſee a Kamtſchadale admitted to this dignified office.

177 Theſe popes are all under the authority
793 of a protapope, or high prieſt, reſident at Nijenei, and he again is ſubordinate to the archbiſhop of Irkoutſk, who alone ordains and appoints the clergy to their cures, ſo that they are all obliged to reſort to this ſettlement. The length and perils of the journey are conſidered perhaps as a kind of initiation; and without any other merit or examination, they probably receive holy orders: it is certain they return neither wiſer nor better. Theſe divines are then ſent to their places of deſtination; the

time

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793/177 time they continue is not limited, and depends on the will of their chiefs.

794 There are eight principal churches in Kamtſchatka: Paratounka, Bolcheretſk, Jchinſk, Tiguil, Vercknei, Klutchefskaïa, and two at Nijenei; to theſe may be added the church of Ingiga, in the country of the Koriacs.

The diſtrict or pariſh of Paratounka includes ſeven oſtrogs and the Kurilles iſlands; viz. the oſtrog of the ſame name, Saint Peter and Saint Paul, Koriaki, Natchikin, Apatchin, Malkin, and Bolcheretſk. The number of pariſhioners contained in theſe oſtrogs, does not exceed four hundred; and including the Kurilles iſlands, the general calculation is not more than ſix hun-
793 dred and twenty Chriſtians. The rector of Paratounka is allowed by the empreſs a

ſalary

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men and women, are chamans, or believers in the witchcraft of these pretended sorcerers. They dread to an excess the popes or Russian priests, for whom they entertain the most inveterate hatred. They do all they can to avoid meeting them. This is sometimes impossible, and in that case, when they find them at hand they act the hypocrite, and make their escape the first opportunity that offers. I attribute this fear to the ardent zeal which these priests have doubtless shown for the extirpation of idolatry, and which the Kamtschadales consider as persecution. They accordingly look upon them as their greatest enemies. Perhaps they have reason to believe, that in wishing to convert them, the overthrow of their idols was not the only thing these missionaries had in view. These popes probably set them no example of the virtues upon which they declaim. It is suspected that their object is the acquisiton of wealth,

rather

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797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka**, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller.

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Koutka their new-born children, who, the moment they have left their cradle, are destined to become chamans. The veneration of the inhabitants of this village for sorcerers can scarcely be conceived; it approaches to insanity, and is really to be pitied; for the extravagant and wild absurdities by which these magicians keep alive the credulity of their compatriots, excites our indignation rather than our laughter. At present they do not profess their art openly, or give the same splendour they once did to their necromancy. They no longer decorate their garments with mystic rings and other symbolic figures of metal, that jingled together upon the slightest motion of their body. In like manner they have abandoned the kind of kettle *, which they used to strike with a sort of musical intonation in their pretended en-

* A sort of *tambour de vasque* called *bouben*. It is still in use amongst the Yakoutsk, as will be seen hereafter.

chantments,

[Mashura--analyst]

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133 This volcano, I was informed, had been at reſt for ſome time, and was ſuppoſed to be extinguiſhed, but it had lately kindled again. North-eaſt of this is a peak, the top of which appears to be the crater of a ſecond volcano, which continually throws up ſmoke, though I could not perceive the ſmalleſt ſpark of fire. The third is north-north-eaſt of the ſecond; I could not obſerve it as I wiſhed, a high mountain intercepting almoſt entirely my view. It derives its name from the village of Klutchefſkaïa, near which it is ſituated; and I was told that we ſhould paſs cloſer to it hereafter. The two other volcanos are called in like manner after the oſtrog of Tolbatchina, where we arrived in good time. This village is upon the Kamtſchatka, forty-four werſts from Chapina, but it contains no-
585 thing extraordinary. We were informed
177 that there had been a Kamtſchadale wedding in the morning. I regretted the not

 having

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585 having been present at this ceremony, which,
177 as I was told, is nearly the same as in Russia.
582 I saw the new married couple, who appeared to be two children. I asked their age. The bridegroom was but fourteen, and the bride only eleven. Such marriages would be considered as premature in any country except Asia.

000 I had an extreme desire to see the town of Nijenei-Kamtschatka, and had long thought how to satisfy it; to have left the peninsula without visiting the capital, I should have considered as an unpardonable fault. My curiosity did not interfere with my resolution of travelling with all possible expedition. I was obliged indeed to make a circuit, but it was not so far as to occasion a delay of any consequence. Having concerted with M. Kasloff, who was anxious to procure every thing that could render my journey agreeable and safe, I engaged

to

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000 over the remembrance of all the pleasures of the day.

The next day I was invited to the house of the protapope, uncle to the bride, where the entertainment was similar to that of the
177/793 preceding one, except the fire-work. I have already observed, that the protapope is chief of all the churches in Kamtschatka. The clergy throughout the peninsula are subordinate to him, and he has the decision of all ecclesiastical affairs. His residence is at Nijenei. He is an old man, not entirely deprived of his vigour, with a long white beard which flows down upon his breast and gives him a truly venerable appearance. His conversation is sensible, sprightly, and calculated to gain him the respect and affection of the people.

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692 There are two tribunals at Nijenei, one that concerns the governments, and the other

takes

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177 takes cognizance of all mercantile disputes.
692 The magistrate who presides in the latter, is a kind of burgomaster, subject to the orders of the *gorodnitch*, or governor of the town. We have already seen that each of these jurisdictions holds from the tribunal of Okotsk, to the governor of which it is accountable for all its proceedings.

563 But what most interested me at Nijenei, and what I cannot pass over in silence, was my finding there nine Japanese, who had been brought thither in the preceding summer, from the Aleutienne islands, by a Russian vessel employed in the trade of otter skins.

One of the Japanese informed me, that he and his companions had embarked in a ship of their own country, with an intention of visiting the more southern Kurilles islands, for the purpose of trading with the

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i. e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya, s. v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenan anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description can do justice, warned us that we were in the neighbourhood of a
491 river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

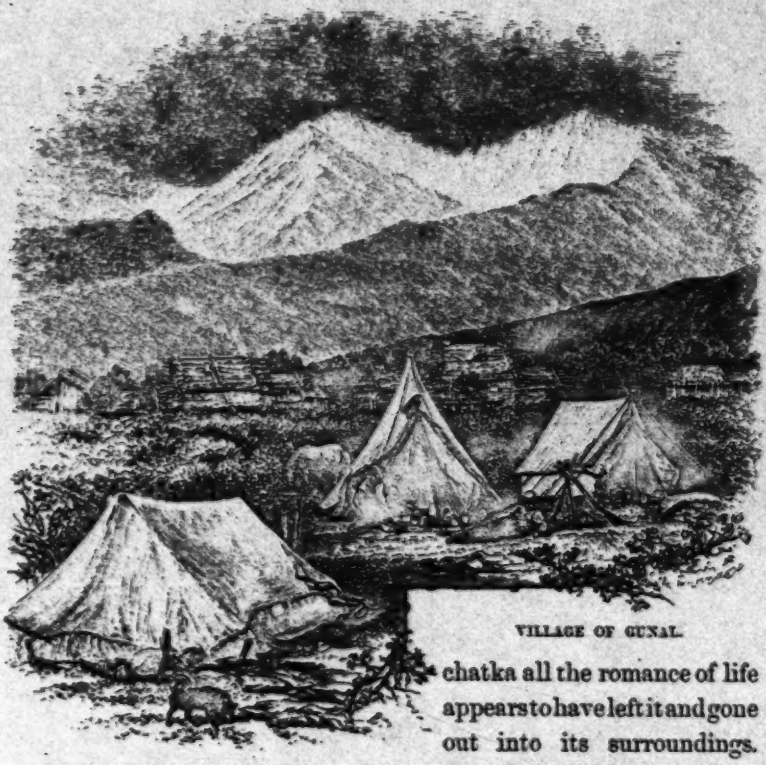
144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established themselves here with Kamschatdale wives in the last century.
361 The latter people are now rare as a pure race, excepting upon the
771 western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

22: Guillemard T-2 (1882) 1886 Kamchadal

They were marked by Russian crosses with a little
177 bronze or brass crucifix roughly nailed on, but there were no inscriptions of any kind.

We pitched our camp at the edge of what, in England, would have been the village-green,—a little two-acre patch of real, short English
000 turf, at a bend in the river. It was a lovely scene. In Kamchatka all the romance of life appears to have left it and gone out into its surroundings. But, however sordid and material the lives of those whose whole existence is one constant struggle against such a climate must be, there is no doubt that nature is here as prodigal of her beauty as she is in any part of the known world. Farther north, in the neighbourhood of the huge volcanoes whose very names are unknown to the vast majority of Englishmen, the scenery is of unsurpassed magnificence. Here it was of a far less



VILLAGE OF GUNAL.

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1737, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

[see page 74--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

114 136 remains of many half-eaten fish lay on the banks. The bears are said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 144 157 161 177 361 Sherowmy, or Sherowm,—for the Kamschatkans are fond of clipping the exuberance of their words, and turn Kamakoffskaya into Kamaki,—is a pretty little village of nine houses and forty-three inhabitants, situated on a branch of the Kamschatka River close to its junction with the latter. To the south lie a few acres of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

22: Guillemard T-2 (1882) 1886 Kamchadal

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Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

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Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

177 Most 1
231 of them were clothed in leather breeches and the boots I have
291 already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

164 If leprosy be in any way connected with a diet in which fish is
262 one of the chief constituents, as is by some supposed to be the case,
757 in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

133 We paddled merrily down stream in spite of the still unsettled
137 arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

[i.e., the inhabitants of Mashura--analyst]

24: Lansdell-637-638 M-2 (1879) 1882 Kamchadal
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has scarcely any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

24: Langdell--638 M-2 (1879) 1882 Kamchadal
116, 177, 793

"I saw, at Khabarofka, and on the steamer, another Kamchatdale, of less presentable appearance-a cleric, wearing his hair in a queue, perhaps for convenience in travel. He was taken, as a boy of 10 years old, to Irkutsk to be educated; afterwards sent to be minister in a church in Russian America, and subsequently became priest of Okhotsk. He is now near Blagovestchensk, and when I saw him was sick. He looked a poor miserable creature, and was pointed out to me by Baron Stackelberg, of whom he had openly asked an alms, as 'ce pauvre diable.' He appeared much pleased with some books I gave him, but was altogether about the poorest specimen of a priest I saw in Russia."

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts, at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c. than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
636.65

"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

27: Sauer--308 T-2 (1789-93) 1802 Kamchadal
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

27: Sauer--310 T-2 (1789-93) 1802 Kamchadal
116, 177, 241, 563 Russia
636.24

"About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Petersburg. Major Reinikin succeeded him in the command, and wished to introduce among the natives the culture of the earth, but could not succeed; he brought potatoe seeds with him; first grew them in his own garden; and from thence they were abundantly distributed all over the peninsula, with every species of garden vegetables, which are cultivated with great success by the Russian inhabitants."

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

*"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-1-2
116, 177, 276, 789

"Notwithstanding the Kamtschadales have renounced most of their former superstitions, they still retain a firm belief in the supernatural powers of the schamans. A Kosak once profited by this credulity to regain his stolen property in a very ingenious manner. While on a journey with several Kamtschadales, he had some of his tobacco stolen from him, and, after questioning every individual separately, he was unable to discover who was the thief. He accordingly took some sticks, and making them of equal lengths, gave each of them one, with the assurance, that the stick of the thief would infallibly grow longer by the [68] power of schamanary. This unpleasant intelligence had such an effect on the imagination of the thief, that he actually conceited that his stick did increase in length, and thought to relieve himself from this dilemma by breaking a piece off. The next morning, every Kamtschadale carrying back his stick, the thief was instantly discovered. He was now obliged to confess the theft, and make restoration. His apology was, that all his own tobacco being gone, he had no money to buy more, and could not dispense with this necessary. Tobacco was remarkably dear at that time in Kamtschatka, a single pound costing a hundred rubles; and yet the inhabitants of this place sacrificed every thing to the indulgence of their passion for this intoxicating herb. Its ordinary price on a fresh supply is only two rubles and a half.

Tobacco is one of the most lucrative branches of trade in these parts, and always finds a ready sale; for there is not a tribe or nation having any intercourse with the Russians, which does not smoke, chew, and take snuff. The Burats, Jakuts, Koraks,

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-2
116, 177, 276, 789

Jakugirens, and Tschukschens, like the strong Tscherkapian tobacco, and are not fond of that which grows in the country of Irkutsk. They smoke it with a mixture of half saw-dust; but the Kamtschadales and Aleutians only chew tobacco and take snuff."

28: Sarytschew--70 T-1 (1789-90) 1806 Kamchadal
116, 177, 436 Russia
636.43

"Copper money is scarcely known in Kamtschatka, silver coin only being in use; but small notes or assignations are beginning to get introduced."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2(1821-22)1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

175 until Vladimir Atlassof discovered the peninsula in his excursions from the Anadyr, from which time a constant petty warfare continued between the Russians and natives, until the general revolt and massacre in 1731. Since this period, the peninsula has not been greatly troubled with either
171 conspiracies or massacres. Little doubt can exist
177 that the Kamtchatdales are of Asiatic origin; of
181 this, their features and customs, as well as their dwarfish size, are evident tokens. I have read several dissertations upon the subject, but disagree with most of them. My own opinion is formed from ocular demonstration alone, and not from a study of the circumstances under which they labour. Their having progressed from America is indeed a ridiculous idea; and their having learnt many secrets, as causing fire by friction, &c. from the inhabitants of the opposite continent, is just as probable as the other sagacious notions, that they were the teachers. How, in either case, could they pass that formerly ferocious and warlike race, the Tchuktchi? Or if they had come from the north of Siberia, from Irkutsk or Yakutsk by Okotsk, and Idgiga, how did they pass the still more fierce and barbarous Koriaks? The idea is absurd; and the only one I can for a moment entertain is, that they are a Mongole tribe, who were driven down the Amoor, and passing along the Kurile Isles, reached Kamtchatka. A few of the same race are still the inhabitants of those isles,

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

1: Kolarz J-4 (no date) 1954 RR1 Siberia
Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

K /3 cont./ 4. (cont.)
101 die Altaisch. Völker /Ethnological
12 Lectures on the Altaic Peoples/, ed.
114 by A. Schiefner, St. Petersburg, 1857,
113 p. 87. The same, Versuch einer Jenissei-Ostjak und Kottischen Sprachlehre /Tentative Ket and Kot Grammar/, ed. by A. Schiefner, St. Petersburg, 1858, pp. V, VI.

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KL
121 But even for the
177 Yenisei Ostyak, standing isolated today, the present situation is not much better than for the above-mentioned Yukagir, Italmen or Kamchadal, and many other Siberian tribes. To be sure, they have managed to survive, but as a consequence of their constant and close intercourse with the Russians and living with them, their peculiar tribal character has been completely lost, and it is hardly possible now to reconstruct the original picture of these tribes with even the most meticulous research. How far and in how short a time, for example, has the disintegration processs affected even the more remote Kamchadal, isolated by the peninsular position of their country? Today we would scarcely know anything more to say about them had not Krascheninnikof /Krasheninnikov/ and Steller determined their main features. What has once been neglected here cannot be collected again later.

SS At present the peoples of the Amur region, too, have entered
167 upon such a process of disintegration. Indeed, it may proceed
177 all the more rapidly among them, since the colonization of this
121 country on the part of the Russians, as mentioned above, has been conducted with a vigor that has no equal in Siberia. The descriptions of later travelers indicate beyond doubt that the individuality of these peoples is rapidly disappearing. Even today it may often be rather difficult to find out what is original and peculiar in their practices, customs, and conceptions under what is foreign and superimposed growing over it. This difficulty did not yet exist at the time when I made their acquaintance.

2: Schrenck--409 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Southeast Siberia RK1
Feudal Japan AB2
Kamchadal RY3
Ainu AB6

000 /192 cont./

"Ssissa" (5). In view of the lack of any contact between the Amur

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5. The Chinese traders on the Amur and Sungari use the same name for the Japanese. Even in the Sungari region Venault heard of a "Si-san" country to the north, which he hoped to reach on his trip down the Amur (1850). On the way, he was told by Chinese traders that they themselves never went to Si-san, but only traded with it through the mediation of the Jupi-tatse. On the basis of all the information that he had collected, he suspected that "Si-san" was the island of Karaftu (Sakhalin) (see his "Excurs. dans les parties intér. de la Mandchourie" -- Nouv. Ann. des Voyages, fifth series, Vol. XXX, 1852 [Vol. II], pp. 207, 215, 222, 224).

S.S. [113]

K SS. FJ 101 114 174 177 A 101 A [133] A F.J. 101 175

In view of the lack of any contact between the Amur peoples and the Kamchadal and their completely different languages, the almost identical name that they have for the Japanese indicates that they must have taken it /193/ from the same source. And this source is easily found. It is the Ainu: for the Amur peoples, the Ainu of Sakhalin; for the Kamchadal, the Ainu of the Kuriles. Just as the one bridge, Sakhalin, leads from Jesso /Yesso/, the main island of the Ainu, to the Amur region, so the other bridge, the island chain of the Kuriles, leads from Jesso to Kamchatka. It is known from Japanese as well as European sources that the Ainu of Jesso have a similar name for the Japanese. In the description of Jesso written in the seventeenth century by the Japanese Kannemon and translated by Titsingh (1).

A F.J. [113]

1. "Jeso-ki, ou Descr. de l'île de Jesso," etc., compiled by the interpreter Kannemon and published in 1632; translated by Titsingh,

G /353 cont./
352 running under it and therefore is better suited for the feet than
354 for the head. There is another justification for this custom in
513 the winter houses of the Amur peoples. If one lies with his
516 head against the wall, he exposes himself so that the rats,
171 which are exceedingly abundant in these houses and which al-
[136] ways run along the walls, would be constantly running over the
G face. This alone, however, would not make the Gilyak refuse
[184] to allow even a stranger to assume this position on their kang,
[199] if superstition did not demand strict observance of the tradi-
tional custom, and afraid of any violation of it, no matter by
G whom, as misfortune for all the inhabitants of the house.
342 Due to the lack of historical data, it cannot be deter-
171 mined when the Chinese winter-yurt reached the Gilyak on the
Amur and, gradually spreading downstream, supplanting the
earth yurt, reached the Amur-Liman, the coast of the Sea of
G Okhotsk, and the Liman coast of Sakhalin. In the reports of
[175] Pojarkof and Nagiba, who spent the winter among the Gilyak
at the mouth of the Amur and along the Sea of Okhotsk in 1644-
45 and 1652 (3), there are, unfortunately, no hints which would

3. See pp. 216, 219 ff. above.

K permit conclusions about the nature of the Gilyak houses at that
342 time. In the case of another Paleo-Asiatic people, the Kam-
179 chadal, we see the original earth-yurt completely disappear
175 before an imported, foreign type of house construction within
the short space of about 50 years. At the time of Krascheninnikof
and Steller (in the forties of the previous century), all the
Kamchadal still lived in earth yurts of the type described above.
Even in 1779, when Clerke, the successor of Cook on the latter's
third voyage, visited Kamchatka, at least the south of the
peninsula, between Peter-and-Paul's Harbor and Bolscherezk (4).

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[113]

4. Tagebuch einer Entdeckungsreise nach der Südsee in den Jahren 1776-1780 unter Anführ. der Capitäne Cook, Clerke, Gore und King, transl. by J.R.Forster, Berlin, 1781, p. 333.

/353 cont./

K 342 175 177 Shortly thereafter, however, in 1790, Ssarytschof reported /354/ from his journey through the country that there were no longer any earth yurts anywhere and that instead of them Russian-style houses (log houses, so-called isba) had been built everywhere; only the summer dwellings of the Kamchadal, which are likewise peculiar, had been retained (1). On the basis of a remark by

G 114 175 342 177

1. Sarychev", Putesh. po Sieverovost. chasti Sibiri, Pt. I, p. 179.

Mamia Rinsô on his voyage in 1809 from Deren down the Amur, one might think at first glance that the same thing had happened among the Gilyak on the Amur. Coming from the territory of the S'janta (Olcha), when he entered the territory of the Smerenkur (Gilyak) at Horo (Chjare), he noticed that from there on people, dwellings, implements, and way of life changed and became exactly the same as on Krafto (Sakhalin) (2). One might

2. Siebold (Nippon, VII, p. 177). Cf. also p. 248 above.

think, therefore, that at that time the Gilyak on the Amur were still living in earth yurts as on Sakhalin. But this is impossible, for, as mentioned above (p. 466), four years earlier Krusenstern had found Chinese winter-yurts among the Gilyak on the northern tip of Sakhalin, that is, at the farthermost point, as far as these dwellings are found even today. If, in addition, one considers the fact that Mamia Rinsô was traveling in summer, there can be no doubt but that his above remark referred to the summer dwellings, which in fact, as we shall see in a moment, are quite different among the Gilyak on the Amur and on Sakhalin than among their neighbors, the Olcha, and the other Tungusic Amur-peoples. Conditions in Kamchatka and in the lower Amur region were too different to have produced an equally rapid disappearance of national peculiarities in both places. In the former, the Russians, after conquering the region, settled

K 342 177 G [342] [177] K [648]

K 342 177 648 /354 cont./ permanently among the natives, who were greatly decimated by the previous bloody battles, building their houses in their own way and entering into permanent, peaceful relations with the Kamchadal, even mixing with them more and more. It is therefore not surprising that their style of building soon became the customary one throughout the region. Matters were different in the lower Amur region among the Chinese and Manchu: a conquest and colonization of this region by the peoples named have never taken place. As was discussed above in detail (3),

G 342 177 439 [648]

3. See pp. 119, 142-144 above.

it instead was and is visited only from time to time by individual Manchu officials and Chinese merchants who, in a few places where they have their own houses, always take up residence in the houses of the natives, and this only among the Tungusic Amur-peoples, for the Gilyak have even denied the Chinese traders entry into their region. Hence, it undoubtedly must have taken a long time before the Chinese winter-yurt reached the Gilyak from the Chinese on the Sungari, spreading down this river and the Amur from people to people, and the trading expeditions which the Goldi, Olcha, and Gilyak from ancient times to now have conducted annually to the Chinese along the Sungari and on which they have had repeated opportunities to become familiar with and to appreciate the type of construction of the Chinese house, must certainly have contributed most of all to its adoption and further spread among the Amur peoples.

G [174]

G 342 /355/ In April and May, when spring comes, the Gilyak find it necessary to abandon their winter dwellings and to move into their summer dwellings. First the inhabitants of the earth yurts are driven out of their houses, because they are made wet and uninhabitable by the water running in both from the top and the sides as a consequence of the melting snow and the thawing of the ground. The Chinese winter-yurts, set on level ground, are more serviceable, even in spring and summer, though even in them water sometimes comes through or over

G /358 cont./
343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

G
342 /359/ Like the earth yurt, all the pile buildings men-
343 tioned above, the summer yurt, the storehouse, etc., are original,
171 peculiarly Gilyak structures which the neighbors of the Gilyak, the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to
K [175] [342] Krascheninnikof's and Steller's descriptions and an illustration given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan
000 by the Russians (1). The Eskimo of the American Northwest along
K [113]

1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

K [132]

K [178] [177]

Goldi RX3
Orok
Kamchadal RY3

Gi 325 177

/570 cont./

them but from the two peoples between which they had wedged themselves on the island. It is certainly a remarkable fact that

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/571/ a poor and not very numerous nomadic people like the Orok does not satisfy its small requirements in iron utensils from the neighboring sedentary peoples, but rather make their own. Yet it is even more noteworthy that the Orok manufacture these articles in such quantities that they even use them as articles for barter in their trade with the Gilyak, who themselves are skilled in the smith's craft, indeed, more skilled than the Orok, and from whom the latter, no less than their tribal relatives on the mainland, the Amur Olcha, presumably once learned it. In Ytkyrn in the Tymy Valley I saw a number of knife blades of various kinds (from the belt-knife, fish knife, etc.), which the Gilyak had obtained in trade from the Orok on the Poro-nai for tobacco (a few leaves for each piece). They were only crudely made and entirely without handles, merely the basic raw material, so to speak, which still needed to be worked over individually for polishing, buffing, mounting, and decorating by the Gilyak in order to reach its final specifications. Thus, in the making of iron tools, the Orok play the role of suppliers of raw material, so to speak, for the Gilyak -- a relationship that rests, on the one hand, on the large requirements of the Gilyak for such tools, with only a relatively small quantity of raw material, and, on the other hand, the opportunity offered by the Orok to procure this material in greater quantities from the not too distant Japanese, either directly or through the Ainu. If in this whole situation the Orok occupy only a subordinate place in relation to the Gilyak they, on the other hand, manifest an unquestionable superiority in comparison with the Ainu, at most functioning only as middlemen for the raw material, and their far greater political independence with respect to the Japanese corresponds to this.

K 325 177

In addition to the Ainu and Gilyak, there is still another Paleo-Asiatic people that received its first knowledge of iron from Japan. This is the Italmen or Kamchadal, and, to be sure, the iron, as in the case of the Gilyak, was brought to them by the Ainu.

/571 cont./

000 K 177 192 174 325 Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

K 439 325 177 556 823 K 823 A 823 186 439

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4
KAMCHADAL RY3
CHUKCHEE RY2

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K1

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It is important to point out here some peculiarities of the present Kamchadal myths as compared with those related by Steller, and with the Koryak myths. In the myths collected by Mr. Bogoras, adventures are ascribed to Kutq and to members of his family, which, among the Koryak, are told about kalau.[1] For instance, in one tale[2] Miti′ cuts off her nose and lips, and catches the mice which are in her light; but the Fox sets the mice free, and finally kills Miti′ by throwing her down a rock. In Koryak tales[3] all this is told with reference to a kala-woman. I am inclined to attribute this divergence to the effect of Russian influence. The Kamchadal adopted Christianity long ago, and in a certain sense they are devout Christians, while the Russian priests constantly try to persuade the natives of Siberia who have been converted to Christianity that their former gods are devils and evil spirits. Thus, the Yukaghir of the upper Kolyma, in my presence, called their ancient guardian-idol, which was hanging in the woods, "Satan;" and the scaffold graves of their ancestors, and those above ground, which they used to worship, the Russianized Yukaghir of the Lower Kolyma now call "the graves of the perished (могилы пропащихъ)," an expression which is otherwise applied to animals only; and they remained quite indifferent when I proceeded to open those graves.[4]

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Comparison with Chukchee Mythology. — The relation of the Koryak folk-lore to that of the Chukchee is somewhat different from its relation to the Kamchadal folk-lore. As may be seen from the publications of Mr. Bogoras,[5] the influence of the Eskimo myths upon Chukchee folk-lore was greater than that upon Koryak folk-lore; and the cycle of raven myths is therefore less preponderant than that of the Koryak. Big-Raven and Raven-Man of the Koryak are merged into one person named Ku′rkıl (Raven); and the Creator of the Koryak myths, identified among the Koryak with Big-Raven, appears among the Chukchee (with the exception of the passages enumerated before)[6] as a being independent of Ku′rkıl, but the same as the Supreme Being. From this we may draw the conclusion that the raven of the Chukchee, owing, perhaps, to the effect of their contact with the Eskimo, has lost its place as the ancestor of the tribe, and remains merely a hero of the animal epos. On the other hand, the Chukchee have retained more cosmogonic tales about the raven than the Koryak, which, however, might be explained by the fact that Koryak folk-lore is on the decline. Incidents of maritime life, which are very prominent in the Koryak myths, are even more prevalent in those of the Chukchee, where they assume a coloring of Eskimo life.

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[1] Tales 32, 56, 79, 112 (pp. 181, 212, 246, 402).

[2] Tale 131 (p. 331).

[3] Tales 32, 56 (pp. 181, 212).

[4] It must be noted here that in one Koryak tale of Kamenskoye (Tale 108, p. 295), Big-Raven's son, Eme′mqut, appears as a cannibal in the same manner as the monster gormandizer of Tale 112, p. 302. This may also be ascribed to Russian influence.

[5] Chukchee Materials, Introductory; Anthropologist, pp. 682, 683.

[6] See p. 17.

177.10 - 177.88

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OF THE

CONQUEST of *Kamtſchatka.*

PART IV.

CHAP. I.

Of the DISCOVERIES *made of* Kamtſchatka, *and the Planting of* Ruſſian *Colonies there.*

R. 177 .17

THO' the *Ruſſian* territories upon the Frozen Ocean, from the river *Lena* eaſt to the river *Anadir*, were of prodigious extent, yet it was judged proper to give orders to every commiſſary to inform himſelf of the countries beyond the *Anadir*, and to endeavour to bring the inhabitants under ſubjection. By this means a knowledge of *Kamtſchatka*, and of the different people who inhabit it, was long ago obtained; eſpecially ſince the *Koreki*, which live upon

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upon the *Penſchinſka* and *Olutorſkoy* ſeas, came from *Anadir*, and had communication with the inhabitants of *Kamtſchatka*, to whoſe country they frequently travelled. But we have ſtill no authentick account who was the firſt *Ruſſian* that diſcovered theſe places: there is, it ſeems, a tradition of one *Theodot*, who for the ſake of trade went into *Kamtſchatka* as far as the river *Nicula*, which river is now called after him, *Theodotoſhine*. They pretend, that he went out of the river *Bova* into the Frozen Ocean with ſeven boats; that, being ſeparated from the reſt by a ſtorm, he was driven to *Kamtſchatka*, where he paſſed the winter; that the next ſummer, going round the *Kurilſkaya Lopatka* through the *Penſchinſka* ſea, he arrived at the river *Tegbil*, where he and all his company were murdered by the *Koreki*, which diſaſter was occaſioned by their having ſeen one of the *Ruſſians* kill another with fire arms; for the *Koreki* upon obſerving the effect of theſe weapons at firſt eſteemed the *Ruſſians* as ſome ſuperior beings; but perceiving them to be mortal, they were glad to free themſelves from ſuch dangerous neighbours. This tradition is confirmed by the account of one *Simeon Deſhnef*; who relates, that their voyage was very troubleſome, and that they were driven at laſt upon that promontory to the eaſt of the river *Anadir*: however, all this ſeems to be very uncertain. There is likewiſe an account, that in the year 1660 they recovered a woman who had been carried away from *Jakutſki* by the *Koreki*, and who related, that *Theodot*, with one of his companions died there of the ſcurvy; that others of them were murdered; and that the remainder, who eſcaped in boats, were never heard of. The *Kamtſchadales* acknowledge that ſome winter huts upon the river *Nicula* were built by *Ruſſians*.

All theſe different reports may eaſily be reconciled, if we ſuppoſe that *Theodot* and his companions were loſt between *Anadir* and *Olutorſkoy*. They had wintered in *Kamtſchatka*, upon the river *Tegbil*; whence in returning to *Anadirſk* over land,

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land, he died upon the road, and his companions were either murdered or loſt. However, at any rate, this diſcovery was of no great conſequence to the intereſt of the empire, as no information of the country was thereby obtained; ſo that the firſt diſcovery of *Kamtſchatka* may be attributed to the Coſſack *Atlaſof*.

This *Atlaſof* was ſent from *Jakutſki* to the fort *Anadirſk* in the year 1697. He was ordered to ſee if he could diſcover new countries, and bring them in ſubjection to the empire of *Ruſſia*, by the aſſiſtance of the *Koreki Yukageri*, who lay near *Anadirſk*. In the year 1698 he ſent out one *Luke Moroſkoi*, with ſixteen *Koreki*, in order to gather in the taxes at the moſt diſtant places; who at their return reported, that they had not only been among the *Koreki*, but even within four days' journey of *Kamtſchatka*; that they had taken one of their little forts, and had got a letter written in a language which no body could underſtand. Upon this, *Atlaſof*, with ſixty Coſſacks and as many *Yukageri*, marched into the country of *Kamtſchatka*, in order to make diſcoveries, and to prevail upon them to pay tribute, which he by fair methods obtained from the *Acklanſki*, but the fort *Taloſki* he reduced by force. After this, as they relate, he divided his company into two corps; the one of which he ſent to the Eaſtern Ocean, under the command of *Luke Moroſkoi*, and with the other he in perſon went towards the *Penſchinſka* ſea. Upon the *Pallana* his allies, the *Yukageri*, rebelled againſt him, killed three of his Coſſacks, and wounded *Atlaſof* himſelf and fifteen others; however he overcame the *Yukageri*, and killed them all. Notwithſtanding this misfortune he purſued his journey ſouthwards. Upon the river *Tegbil* he joined the party under *Moroſkoi*, and exacted tribute from the people that lived upon the *Napan*, *Kigil*, *Itche*, *Sintche*, and *Haruſof*, and reſcued a *Japaneſe* priſoner that he found among the *Kamtſchadales*.

Returning from the river *Itche* he went to the river *Kamtſchatka*, where he built the upper *Kamtſchatkoi* fort,

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and left in it *Potap Sirukof*, with fifteen Coſſacks. *Atlaſof* returned from this journey to *Jakutſki* the 2d of *July* 1700, and brought along with him the *Japaneſe* he had reſcued, and the *Kamtſchatka* tribute, which conſiſted of 3200 ſables, ten ſea beavers, ſeven pieces of beavers' ſkins, four otter ſkins, ten grey foxes, and 191 red foxes; and 440 ſables on his own account. With this tribute he was diſpatched to *Moſcow*, where, for his ſervices, he was made Chief of the Coſſacks at *Jakutſki*, and was ordered to return again to *Kamtſchatka*, and to take along with him from *Tobolſka*, *Jeniſei*, and *Jakutſki*, 100 Coſſacks. Orders were ſent to *Tobolſka* to furniſh them with ſome ſmall cannon, colours, a drummer, arms, and ammunition. However *Atlaſof* was prevented from this expedition before the year 1706; for in the year 1701, upon the river *Tunguſi*, he plundered a boat with *Chineſe* goods, belonging to *Logan Dobrini*, whoſe ſervant petitioned againſt him, at the Chancery of *Jakutſki*, for which he and ten of the principal robbers were put in priſon; and in the year 1702 *Michael Zinoveef*, who had been there formerly, was ſent chief of this expedition.

All this time the Coſſack *Potap Sirukof* lived quietly in the fort of *Kamtſchatka*, and for three years received no injury from the inhabitants: for he did not demand any tribute, but only traded with them like a merchant. At laſt they determined to leave the fort; but on their return to *Anadirſk*, he and all his companions were ſet upon and killed by the *Koreki*. His ſucceſſor appears to have been *Timothy Cobelof*, who is reckoned the firſt governor of *Kamtſchatka*. In his time a fort was built upon the river *Karakeef*, about half a verſt diſtant from the firſt. He built winter huts upon the river *Yelofka*, and gathered voluntary tribute upon the river *Kamtſchatka*, and upon the *Penſchinſka* and Beaver ſea coaſt; with which he returned, in the year 1704, to *Jakutſki*. At the ſame time a party of the *Anadirſki* Coſſacks, under the command of *Andrew Kutin*, built ſeven winter huts upon the river *Yaka*, which falls

falls into the Eastern Ocean, and began to gather taxes from the neighbouring *Koreki* R. 177 .17

Michael Zinoveef, sent in place of *Atlasof* from *Jakutski*, succeeded *Cobelof*; which place he held 'till he was relieved by *Kolesof*, in the year 1704. In his time he made books of tribute, in which the names of the *Kamtschadales* were inserted; he transported the winter huts to a more convenient place, built a little fort upon the great river, and having brought things into tolerable order, he returned to *Jakutski* with his tribute. *Kolesof* arrived there in the harvest 1704, and continued to the year 1706; for the *Outori* killed two persons on their journey that were appointed to relieve him, viz. *Vasili Protopopof* in 1704, and *Visili Shelcocosnicof* in 1705. In his time was the first expedition undertaken against the *Kuriles*, about twenty of whom they brought back with them, and drove all the rest away. He carried all his tribute safe to *Jakutski*, notwithstanding he was way-laid at the fort *Kasuki*, upon the river *Pingin*, by the *Koreki*, but he retired to another little fort called *Aklanski*, where he lived about fifteen weeks, 'till the winter way became passable. During this time the *Koreki* of *Kasuki* tried several times to surprise him, but he was defended by the inhabitants of *Acklanski*. Here *Kolesof* met seven people that were sent with presents and ammunition to the fort of *Kamtschatka*; as he was in great want of the latter, for their security he added to them thirteen of his own party, and gave the command to *Simon Lomgaf*, whom he ordered likewise to gather tribute round the three *Kamtschatka* forts.

At the departure of *Visili Kolesof* all the tributary *Kamtschadales* were tolerably quiet; but afterwards, when *Theodore Anqudenof* was commissary in the upper fort, *Theodore Yaregin* in the lower fort, and *Demetrie Yaregin* upon the Great River, the inhabitants of the Great River rebelled, burned the fort, and murdered all the inhabitants: at the same time five tax-gatherers were killed upon the Beaver Sea. The reason of their rebellion

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perhaps might be, that the taxes were gathered with severity, which was the more intolerable, as formerly they had never been accustomed to pay any, and therefore endeavoured, by the murder of their oppressors, to recover their ancient liberty: besides, they imagined that these *Russians* might be themselves some runaways, as they had never observed any new faces among them; they hoped too, that the *Koreki* and *Olutores* would prevent the arrival of new recruits from the *Anadirsk*, as they heard that they had murdered two commissaries, with the Cossacks under their command; however they were deceived in their hopes, for a great many of them were killed by their future conquerors, and their numbers very much reduced.

All this while the Cossacks were obliged to be very much upon their guard, and keep themselves close in their forts. In the year 1705 *Atlasof* was freed from prison, and sent commissary to *Kamtschatka*, with full authority, the same as he was invested with in the year 1701. The absolute power of punishing with rods, or even the knout, was no otherwise circumscribed than by a recommendation to do strict justice, and to treat the *Kamtschadales* in particular with lenity and tenderness. He went from *Jakutski* accompanied by a great number of Cossacks, furnished with warlike stores, and two pieces of brass cannon; but so far did he forget the favour of the pardon he had obtained for his former robbery, and disregard his new instructions, that before he arrived at *Anadirsk* he began to exercise his cruelty upon those that were under his command, and became so intolerable that they sent a petition thence against him to *Jakutski*. Notwithstanding this he arrived safely at *Kamtschatka* in the month of *July* 1707, and took the chief command over all the commissaries that were there.

In the month of *August* he ordered one *John Taretin*, with seventy Cossacks, to march against the rebels who had killed the tax-gatherers upon the Beaver Sea. He met with no opposition before

before the 27th of *November*, in his whole march from the upper fort to *Awatscha*, but coming near the bay of *Awachinskay*, which is called at present the haven of *Peter* and *Paul*, they were met in the evening by 800 *Kamtschadales*, who thought themselves so certain of overcoming the Cossacks, that they resolved not to kill but take them all prisoners, every one being furnished with a rope to bind them.

The next day *Taretin* went to the bay of *Awatchinskay*, where he found all the boats and vessels of the rebels; but they had hidden themselves in the woods on each side of the road; and allowing the headmost to pass they rushed out upon the middle from both sides. The Cossacks defended themselves so well, and fought so obstinately, that great numbers of the rebels were killed, and the rest saved themselves by flight; six of the Cossacks were slain, and several wounded. There were only three *Kamtschadales* taken prisoners. After this action the inhabitants continued in a state of rebellion 'till the year 1731. From this expedition the Cossacks returned to the upper fort with what tribute they had gathered, and some hostages. Hitherto the government of *Kamtschatka* had been in tolerable order, and the Cossacks preserved a regard for their commanders; but afterwards they began to commit great irregularities, plundering the inhabitants, seizing their persons, and murdering others, in defiance of the governor.

CHAP.

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CHAP. II.

Of the MUTINY *of the* COSSACKS, *and their Discovery of the Islands lying between* Kamtschatka *and* Japan.

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THE Cossacks were dissatisfied with *Atlasof*. This discontent, encreasing by his continued ill conduct and their own licentiousness, made them resolve to deprive him of the command, which they did in *December* 1707; and they wrote to *Jakutski*, in their own vindication, that he gave them none of those provisions which were gathered from the *Kamtschadales*, for their sustenance; for they being otherwise employed in the fishing time, than in catching fish, must starve, unless the governor would supply them from the publick stores, which they charged him with embezzling for his own private advantage. They also accused him of having taken bribes to let the hostages go, which rendered the natives so insolent, that the tax-gatherers upon the *Penschinska* sea were obliged to save themselves by flight. To this they added his cruel treatment of *Daniel Belaiof*; and that, when the other Cossacks begged of him that he would not cut and slash any of them in his passion, but punish them as his orders directed in case they were found guilty, he replied, that if he was to kill them all he should not be punished for it: they besides represented, that he endeavoured even to irritate the natives against the Cossacks; for having called some of the principal people of the former, he told them, he had wounded that Cossack because he and others would have forced him to take the bread and provisions from them, their wives, and children; upon which the *Kamtschadales* in that neighbourhood left the place, and killed three Cossacks; that he had

had taken to his own uſe moſt of the goods that were ſent from *Jakutſki* to make preſents of to the natives; and that he had compelled one of the *Kamtſchadales* to give him a black fox-ſkin for his own uſe, which the ſaid native had deſigned to pay in as a tribute.

This accuſation of their's, though it may be a proof of their former mutinous diſpoſition, yet gives us room to believe that a great deal of what they alledged was true, he being a man of a very bad character and conduct, and exceedingly avaricious, as appeared by the great riches he had amaſſed in ſo ſhort a time: but it is ſcarce credible that he ſhould endeavour to irritate the natives againſt his own people, on whoſe protection the ſafety of his own life depended; for the intended murder of the tax-gatherers upon the *Penſchinſka* ſea was more to be attributed to their own oppreſſion of the natives than to any miſrepreſentation of *Atlaſof*, as it appeared they threatened to kill ſome *Kamtſchadales*, who inſiſted on paying but one ſable inſtead of two.

They conferred the command on *Simeon Lomyof*, impriſoned *Atlaſof*, and confiſcated all his effects to the treaſury, which conſiſted of 1234 ſables, 400 red foxes, 14 grey foxes, and 75 ſea beavers, beſides a great number of other furrs. *Atlaſof* eſcaped, and fled to the lower fort, of which he endeavoured to obtain the command, but was prevented by the commiſſary *Theodore Yaregin*. During theſe confuſions, the petition that was ſent againſt *Atlaſof* reached *Jakutſki*. The governor, fearing that the diſſentions and differences between *Atlaſof* and the Coſſacks might occaſion the loſs of *Kamtſchatka*, ſent to court for farther directions; and in the interim diſpatched *Peter Tcherekof*, with fifty-five Coſſacks, two pieces of cannon, and ammunition. While *Tcherekof* was upon the road, advice was brought from *Kamtſchatka* that the Coſſacks had taken the command from *Atlaſof*: upon which orders were ſent after *Tcherekof*, to examine ſtrictly into

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During the government of *Tcherekof* two things happened that deserve notice: 1st, The unfortunate expedition of the Cossack Lieutenant *John Haritonof* with forty men against the rebels upon the North-East River, who fell upon him in great numbers, killed ten of his people, and wounded most of the rest, whom they likewise kept besieged four weeks. 2d, A bark from *Japan* being cast away on the Beaver sea coast, *Tcherekof* went with fifty men and rescued four of the *Japanese* from the natives, whom on that occasion he reduced to obedience, as also the inhabitants round the rivers *Jupinof* and *Ostrova*, and obliged them to pay their tribute.

In the month of *August*, when *Tcherekof* returned to the upper *Kamtschatka* fort, he found the Lieutenant *Myeronof*, who was sent to relieve him; so that at this time there were three chiefs at *Kamtschatka*, namely, *Atlasof*, *Tcherekof*, and *Mieronof*.

When *Tcherekof* had delivered up to *Mieronof* the command, he left the upper *Kamtschatkoi* fort in the month of *October*, and taking with him the tribute he had gathered, with a proper convoy, marched to the lower fort, where he resolved to winter, and in the

the ſummer to ſail through the *Penſchinſka* ſea. *Joſeph Mieronof* came likewiſe to the lower fort upon the 6th of *December*, to give orders concerning the building boats for carrying off the tribute; and having left proper directions for this purpoſe with *Alexi Alexander*, he ſet out with *Tcherekof* to the upper fort, on the 23d of *January* 1711: but he was murdered on the road by the twenty Coſſacks who were his convoy. In the mean time thirty-one of the others went to the lower fort, where they killed *Atlaſof*. The heads of this mutiny were *Daniel Anſiforof* and *John Koſoroſki*, who ſhared the goods of thoſe they put to death; and inviting all the reſt to join with them, their number increaſed to ſeventy-five. All *Atlaſof*'s furrs and goods which were carried to *Teghil* they brought back, ſeized on all the ſtores which were got ready for *Tcherekof*'s voyage, and deſtroying the ſails and cordage returned to the upper fort on the 20th of *March*.

On the 17th of *April* in the ſame year, theſe mutineers ſent a petition to *Jakutſki*, confeſſing the murder of *Tcherekof* and *Mieronof*, without mentioning that of *Atlaſof*. In this petition they endeavoured to excuſe their conduct, by accuſing theſe commiſſaries of tyranny and avarice, and charging them with having embezzled the effects of the government, and purchaſing goods upon their own account, from which they received incredible profits; and that they had treated both the natives and Coſſacks with great ſeverity, to avoid which they were obliged to give them up their beſt effects, and to receive their ſalary in what goods they thought fit to allow them, and thoſe taxed at what price they pleaſed; which oppreſſion they exerciſed in confidence that no petitions againſt them would ever reach *Jakutſki*. To this petition they joined a liſt of the effects of *Tcherekof* and *Mieronof*, which they had found: *Tcherekof*'s conſiſted of 500 red foxes, and 20 ſea beavers; *Mieronof*'s, of 800 ſables, 400 brown foxes, and 30 ſea beavers.

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This year in the ſpring, the ſeventy-five perſons before mentioned marched againſt the rebels, and built a fort upon the Great River, thinking to merit their pardon by ſo eſſential a piece of ſervice as the reduction of that diſtrict. On the 1ſt of *April* they deſtroyed a fort of the *Kamtſchadales*, which lay between the rivers *Biſtroy* and *Goltſofka*, where now the *Ruſſian* fort *Bolſcheretſkoi* ſtands. There they remained without any diſturbance from the *Kamtſchadales* 'till *May*; on the 22d the *Kamtſchadales* and *Koreki* came in boats down the Great River in ſuch numbers that they threatened to ſmother them with their caps without uſing any other arms. On the 23d of *May*, the Coſſacks, after having performed divine ſervice, for they had a prieſt along with them, made a ſally with one half of their party, and firing upon the *Kamtſchadales* ſeveral times, killed great numbers of them: however they continued the fight 'till the evening, when at laſt the Coſſacks obtained the victory. Such numbers of the rebels were killed and drowned in this engagement, that the river was full of dead bodies; but the *Ruſſians* had only three men killed, and ſome few wounded. This ſucceſs was followed by the ſubjection of all the villages and forts upon the Great River, who conſented to pay their tribute as before. They went into the country of the *Kuriles*, and even unto the firſt iſland; all the inhabitants of which they likewiſe made tributary. This was the firſt time that any *Ruſſian* had been upon either of theſe iſlands.

In the year 1711, *Vaſili Savaſtianof* was ſent to ſucceed *Mieronof*; for they had no account yet of his having been murdered, nor had they any knowledge at *Jakutſki* of the fate of the other commiſſaries. *Savaſtianof* gathered the taxes about the upper and lower forts: *Anſiforof*, the head of the mutineers, had done the ſame upon the Great River, and came to the lower fort pretending to have returned again to his duty; however he came accompanied with ſuch a ſtrong party that he was in no danger

danger of being called to account for his mutiny, but was ſent as tax-gatherer to the Great River. As he returned towards the *Penſchinſka* ſea, he reduced to obedience the rebels upon the rivers *Konpackova* and *Woroſski*, and obliged them to pay the tribute, which they had refuſed for ſome time. He was ſurpriſed by the rebels upon the river *Awatſcha* in the month of *February* 1712: When he with 25 Coſſacks came among them, they received him in a large hut, built on purpoſe, with a private entry under it. They made him very rich preſents, promiſed to pay the full tribute, and gave hoſtages as an earneſt of their ſincerity: but the following night they ſet fire to the hut, and burned both the *Ruſſians* and their own hoſtages together; who were ſo irritated againſt the *Ruſſians*, that when the people called to them to come out of the hut, they begged that they would have no regard to them, but burn the Coſſacks by any means.

The puniſhment of the murderers of *Anſiforof* deterred the natives from the like attempts, and procured a laſting ſecurity to the tax-gatherers. A party was ſent out to catch the murderers where they could find them: at this time there was one man taken, who being put to the torture confeſſed not only the murder of the three commiſſaries, but likewiſe a great many other dangerous deſigns, as that they reſolved to deſtroy the upper and lower forts of *Kamtſchatka*, murder the governor *Shepetkof*, plunder the fort of all the goods, and fly to the iſlands; but they were prevented in this by the great number of Coſſacks which they found.

Shepetkof, giving the command to *Conſtantine Koſerof*, left *Kamtſchatka* on the 8th of *June* 1712, and ſailed with the tribute which he had gathered over the *Olutorſkoy* ſea, and up the river of the ſame name as far as it was navigable for boats. Then he was obliged to fortify himſelf againſt the attacks of the *Olutores*, who on the road had ſeveral times fallen upon him.

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him. He continued in this little fort 'till the 9th of *January* 1713, with 84 Coſſacks. In the mean time he ſent to *Anadirſk* for a reinforcement, and carriages to tranſport the tribute. There were ſent him 60 Coſſacks, and a great number of reindeer; with which he ſet out, and arrived ſafe at *Jakutſki* in the month of *January* 1714. This was the only tribute which had arrived ſafe, upon account of the confuſions, ſince the year 1707. It amounted in all to 13,280 ſables, 3282 red, 7 black, and 41 blue foxes, and 259 ſea beavers.

After the departure of *Shepetkof*, *Kregezof*, who was commiſſary in the upper *Kamtſchatkoi* fort, went with ſeveral under his command to the lower fort, ſeized upon *Yaregin* who was commiſſary there, put him to all kind of torture, plundered the fort, and obliging *Yaregin* to turn monk gave the command of the fort to *Bogdan Kanaſhof*; who continued there 'till the arrival of *Vaſili Koleſof*, formerly a lieutenant of the Coſſacks; and *Kregezof* with 18 of the mutineers returned to the upper *Kamtſchatkoi* fort, where he was very troubleſome to the lower fort for a long time.

Koleſof was ſent from *Jakutſki* in the year 1711, with orders to enquire into the conduct of the mutineers, and arrived at *Kamtſchatka* on the 10th of *September* 1712; where he condemned two of the rebels to death, and branded ſeveral others. The lieutenant *Koſerof*, who was head of the mutiny after the death of *Anſiforof*, and ſeveral others, were puniſhed; but *Kregezof*, who was ring-leader in the laſt mutiny, not only refuſed to ſubmit to his juriſdiction, but threatened even to attack him, and to deſtroy the lower fort. In conſequence of which he marched againſt him with cannon and 30 men of his party, and was joined in his march by other Coſſacks from the Great River: however he did not accompliſh his deſign, but was obliged to return to the upper fort, where in

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a very ſhort time his own people took the command from him, and put him in priſon; for finding that the other Coſſacks did not join him, they imagined it would be impoſſible for them to paſs the lower fort in their way to the ſea. Whereupon they divided themſelves into two parties; one of which ſtood by *Koſerof*, and the other joined *Koleſof*. By this means *Koleſof* made himſelf maſter of the upper fort in the year 1713. *Kregezof* was puniſhed with death, with ſome others of the ring-leaders, and the reſt were fined: thoſe Coſſacks and tax-gatherers, who continued in their duty, were rewarded. Thus an end was put to the rebellion.

After this *Koleſof* ſent *Koſeroſki* with 55 Coſſacks, 11 *Kamtſchadales*, and ſome cannon, ordering them to build ſmall veſſels upon the Great River, and to make diſcoveries upon the iſlands that belong to *Japan*. In this expedition they reduced to obedience ſeveral of the *Kuriles* who dwelt upon the *Lopatka*, and the firſt and ſecond *Kuriſki* iſlands. They alſo procured ſome account of the iſlands that were more diſtant, which traded with the inhabitants of the city *Matma*, and who brought to them iron kettles, varniſhed cups and platters, ſables, and different ſorts of ſtuffs made of cotton and ſilk. *Koſeroſki* brought a ſortment of theſe merchandiſes along with him.

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CHAP. III.

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Of the COMMISSARIES *who succeeded* Vasili Kolesof *until the great Insurrection at* Kamtschatka; *with the Discovery of a Passage through the* Penschinska Sea *from* Ochotska *to* Kamtschatka.

IN *August*, 1713, *John Inesiski* was sent to relieve *Vasili Kolesof*. In the time of his government he built a church at a place called the Springs, whither he designed to remove the lower fort, which was afterwards executed; the former situation being on a marsh, which was sometimes overflowed by the high water. This fort continued until the year 1731. In the time of the great rebellion, it was burned down by the rebels. He likewise marched against those who rebelled upon the river *Awatscha*, who had murdered *Ansiforof* with his 25 Cossacks. His strength consisted of 120 Cossacks and 150 *Kamtschadales*. The rebels had fortified themselves so strongly, that they held out two weeks; but at last they set their fort on fire, which was burned with all the people that were in it: the rest submitted, and promised to pay their tribute. They likewise took and burned the fort *Paratoon*. After this time the *Kamtschadales* upon *Awatscha* began regularly to pay their tribute; for before this they generally gave but just what they pleased, being almost always in a state of rebellion.

In 1714 *Yanisioski*, and the former commissary *Vasili Kolesof*, who had not been able to undertake the journey to *Jakutski* for want of hands in the year 1713, passed in boats over the *Olutorskoy* sea, and arrived the latter end of *August* upon the river

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river *Olutora*, where they found *Athanasius Petrof*; who being joined by a great many Cossacks from *Anadir*, together with the *Yukageri*, defeated the *Olutores*, destroyed their strongest places, and in place thereof built a *Russian* fort. Here they remained until the winter. The taxes which both these commissaries brought along with them were 5640 sables, 751 red foxes, 10 blue, 137 sea beavers, 4 ounces of gold in bits, which were taken from the *Japanese*, whose vessels had been wrecked upon the coast of *Kamtschatka*. Upon the departure of these commissaries a garrison of 100 men, a lieutenant, and two priests, were left in the new fort upon the *Olutora*.

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On the 2d of *December* 1714, the *Yukageri* who were with *Petrof* fell upon him near to *Acklanskey* fort, and having murdered him, the people that were with him seized upon the tribute. The commissaries *Kolesof* and *Yanisioski*, with sixteen others, escaped into the *Acklanskey* fort, but were not able to save their lives; for the *Yukageri* surrounding the fort prevailed upon the *Koreki* to murder these people, who had trusted themselves to their protection. The occasion of this misfortune was owing to the tyranny and oppression of *Petrof*. All pains were taken to recover the plundered goods, but to very little effect, as they were divided among so many different nations and people; so that some of the richest furrs fell into the hands of those who knew so little of their value, that for one or two pipefuls of tobacco they would sell a fine sable or fox skin. This disturbance of the *Yukageri* and *Koreki* continued more or less 'till the year 1720, when they were reduced to obedience by *Stephen Trisonof*, a gentleman of *Jakutski*, who went against them with a great number of Cossacks. So far had they carried their designs, that they endeavoured to prevail upon the *Tchukotskoi* to join in their rebellion, and to destroy the fort of *Anadir*.

After the murder of the commissaries the tribute of *Kamtschatka* was no more carried through *Anadir*, but sent directly by sea

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ſea to *Ochotſka*, which is by far a more convenient and leſs dangerous paſſage; ſo that now the road to *Anadir* is entirely neglected. This paſſage by ſea was diſcovered in the year 1715, by one *Coſmus Socoloſ*, who was under the command of Colonel *Ylchin* ſent to deſcribe the iſlands that lie upon that ſea. At this time *Alexi Petriloſki* was commiſſary at *Kamtſchatka*, againſt whom the Coſſacks began again to mutiny; and by the conſent of *Socoloſ*, they took the command from *Petriloſki*, put him under arreſt, and confiſcated his goods. He was the occaſion of his own misfortunes, by extortion, an unbounded avarice, and tyrannically oppreſſing to the laſt degree every man under his command. By theſe means he had acquired ſuch riches in a very ſhort time, that they far exceeded two whole year's tribute of *Kamtſchatka*.

The natives were tolerably quiet all this while, excepting ſome ſmall differences between the *Kuriles* of the *Lopatka* and another tribe, which was the cauſe of the deſtruction of ſeveral tributary *Kuriles*. The tribe, who was the firſt beginner of this confuſion, was ſo much afraid of being puniſhed by the *Ruſſians*, that they would never come to any terms of accommodation. However, at laſt, they were reduced with no great trouble. The conduct of the *Ruſſian* commiſſaries and tax-gatherers was ſo irregular, and ſo diſagreeable to the natives, that the moſt fatal conſequences were to be feared.

To *Petroloſki* ſucceeded as commiſſary *Coſmus Vaichelaſhof*, to whom ſucceeded *Gregory Kamkin*. In the year 1718, at once three commiſſaries were ſent from *Jakutſki*; *John Uvarofski* to the lower *Kamtſchatkoi* fort, *John Porotof* to the upper, and *Baſil Kochanof* to the fort upon the Great River. According to cuſtom, the Coſſacks very ſoon deprived them all of their authority, and put them into priſon, where they continued half a year, and at laſt eſcaped. However, the authors of this mutiny were brought to *Tobolſki*, and puniſhed with death.

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While the Coſſacks perſevered in this mutiny, ſeveral of the tax-gatherers were murdered by the natives. R.

John Charetonof, who had been appointed commiſſary, in 1719 marched againſt the rebellious *Koreki*; but being ſurpriſed by them he and ſeveral of his company were killed, which was done in this manner: The rebels pretending to ſubmit, gave them hoſtages and preſents; but afterwards fell upon *Charetonof*, and killed him and ſeveral others. However, they paid very dear for this treachery; for ſome of the Coſſacks, recovering from their ſurpriſe, drove them into their fort, where they burned or killed every man of them. In the following years, until the great rebellion of *Kamtſchatka*, nothing remarkable happened, if we except thoſe conſiderable expeditions that were ſent out in the years 1727, 1728, 1729, to make diſcoveries among the iſlands of the *Kuriles*. The firſt was conducted by two mariners, *John Evrinof* and *Theodore Luſin*, who returned in 1727. In 1728 was ſent out the firſt great ſea expedition, to diſcover and deſcribe all the coaſt towards the north. Having proceeded as far as the latitude 67° 17′, they returned to *Peterſbourg* in the year 1730. In 1729 a party arrived there under the command of Captain *Paulutſkoy*, and a chief of the Coſſacks called *Sheſtocof*. They were ordered to go along the coaſt towards the ſouth to make proper diſcoveries, and to bring all the inhabitants of theſe places, either by fair means or force, to pay a regular tribute; and for that purpoſe, to build forts, and endeavour to eſtabliſh ſome commerce. They built ſome forts, and deſcribed the coaſt as far as the river *Udan* upon the *Chineſe* frontiers. *Sheſtocof* was killed in the year 1730 by the *Tchukotſkoi*, who had fallen upon the tributary *Koreki*; and Captain *Paulutſkoy* was ordered to join Colonel *Merlin*, in quelling the rebellion of *Kamtſchatka*. He was indeed ſo far more ſucceſsful than *Sheſtocof*, that he ſeveral times defeated the *Tchukotſkoi*, and for ſome time rendered the *Koreki* and *Anadirſkoi* ſafe from their inroads.

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In the ſummer of the year 1729, a *Japaneſe* veſſel was wrecked upon the coaſt of *Kamtſchatka*: there were ſeventeen men on board, all of whom, except two, were murdered by Lieutenant *Stimicof*, who happened to be there at that time. The two ſurvivors were ſent to *Peterſbourg*, where they had the ſatisfaction of ſeeing the murderer of their countrymen publickly executed. In 1730 *John Novogorodof*, and in 1731 *Meyer Shedfordin*, were tax-gatherers in *Kamtſchatka*. We only mention them as being the occaſion of the great rebellion, which we are now to deſcribe.

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Of the REBELLION *of* Kamtſchatka, *the Burning of the Lower Fort, the Subjection of the Rebels, and their Puniſhment.*

THE natives had reſolved for a great while to deſtroy all the *Ruſſians* who were in *Kamtſchatka*; but ſince the diſcovery of the paſſage over the *Penſchinſka* ſea, and the arrival of veſſels with new people, it appeared to them too dangerous: but when Captain *Bering* with his fleet ſailed on the expedition of *Kamtſchatka*, and moſt of the Coſſacks who were ſettled in *Kamtſchatka* were ordered to join Captain *Paulutskoy* at *Anadir*, to ſuppreſs the rebellious *Tchukotskoi*, very few Coſſacks were left in *Kamtſchatka*. This the natives looked upon to be the wiſhed-for opportunity; and during the whole winter the *Niſhnaſhaltalski*, *Klutchefski*, and *Yalofski Kamtſchadales*, under pretence of viſiting one another, travelled through all *Kamtſchatka*, and inſtigated the other inhabitants to join in their deſigns, under

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under pain of being intirely deſtroyed. By theſe means all *Kamtſchatka* entered into a ſtate of open rebellion; and hearing that *Sheſticof* was killed by the *Tchukotſkoi*, they reported that theſe people were marching againſt *Kamtſchatka*, with a view either to have a pretence for collecting themſelves together, or that the *Ruſſian* Coſſacks, out of fear of theſe people, might deſire the *Kamtſchadales* to guard them. Their meaſures were ſo well concerted, that it was a ſingular inſtance of Providence that any of the *Ruſſians* were preſerved; for if they had once been driven intirely out of the country, it would have been difficult for them to have re-eſtabliſhed themſelves. The counſels of the *Kamtſchadales* were far from being ſuch as one would expect from ſavages; they endeavoured to prevent any correſpondence with *Anadirſk*, and kept a ſtrong guard upon the ſea-coaſts, where they might ſeize upon any of the *Ruſſians* that arrived. The chief authors of this rebellion were one *Yalofski Toyon*, or chieftain called *Fetka Harchin*, who had frequently ſerved the *Ruſſians* as an interpreter, and a chieftain of the *Klutchefski*, called *Chugotche*.

While this conſpiracy was in agitation, the commiſſary *Skacurdin* was on his departure from *Kamtſchatka*, with a conſiderable party to guard the tribute. They had ſailed from the mouth of the river *Kamtſchatka* towards *Anadir*, but ſoon after contrary winds obliged them to return. The *Kamtſchadales*, informed of their departure, and ready for the revolt, gathered together, and ſailing up the river *Kamtſchatka* killed every *Ruſſian* Coſſack they could find, burned their ſummer huts, and carried off their wives and children into ſlavery. Their chief ſtrength was directed againſt the fort; where arriving in the night, they ſet fire to the priſt's houſe, concluding that the fire would bring out all the inhabitants. In this they ſucceeded too well, murdering almoſt every perſon, without ſparing either ſex or age. They burned all the houſes, except the fortifications and church, where the goods both of the pub-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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lick and private people were kept. Those who escaped this massacre fled to the mouth of the river, and carried the news to their countrymen, who had not yet left the coast. When the *Klutchefski* chief, *Chugotche*, heard of the taking the lower *Kamtschatka* fort he marched thither, killing or taking prisoners all the *Russians* he met with; and joining *Harchin*, he informed him that the *Russian* vessels were yet upon the coast, for which reason he judged it proper to strengthen themselves in the fort; and sending accounts of their success to all their countrymen, ordered them to join him. The next day they divided all the plunder, and dressed themselves in the *Russian* habits; and some of them, putting on the priest's robes, celebrated their own religious ceremonies and conjurations. *Harchin* ordered a new-baptised *Kamtschadale*, who had learned to read *Russ*, to say mass in the *Russian* manner, and dressed in the priest's robes; for which he made him a present of 30 red fox-skins.

The 3d day after the taking of the fort arrived a *Russian* skipper, *Yacob Hens*, with 60 Cossacks, who was sent with a design to recover the fort from the rebels. He endeavoured by all methods to persuade them to return to their duty, assuring them of a general pardon; but they would not give ear to him: nay, *Harchin*, their chief, told him that he had no business there, and that he was commissary of *Kamtschatka*, and would himself gather the taxes, so that they did not want any Cossacks among them. Upon which *Hens* sent to his vessels for some cannon, and began on the 26th of *July* to fire upon the fort, where he made a very large breach, which caused great confusion amongst the besieged, and gave an opportunity for the women that were prisoners to escape. *Harchin*, finding it impossible to defend the fort, made his escape disguised in women's cloaths; and although he was

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

was purſued by ſeveral, yet he made ſuch expedition that they could not overtake him. After this 30 of the beſieged who remained ſurrendered themſelves; but a *Klutchefski* chieftain, *Chugotche*, with a few people that joined him, held out to the laſt man. During their defence the powder magazine was ſet on fire, which reduced the fort and all the riches in it to aſhes. In this ſiege the Coſſacks had four men killed, and a great many wounded. How many of the *Kamtſchadales* were killed was not known, their bodies being conſumed in the fire; not one eſcaped alive, for thoſe who ſurrendered were killed by the Coſſacks, in revenge for the loſs of their wives and children.

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The ſudden return of the *Ruſſian* party was the occaſion that this revolt was ſo eaſily quelled; for it prevented their aſſembling in ſuch numbers, as they otherwiſe would have done. However, it was not yet intirely over, for *Harchin*, with ſome other chieftains, collected a good number of people together, and reſolved to march to the ſea ſide, and attack the *Ruſſian* veſſels which were there. But, in the very beginning of his march, he was met by a party of *Ruſſians*, which obliged him to fortify himſelf upon the left ſide of the river *Kluchefka*; the Coſſacks encamping upon the right, ſeveral ſkirmiſhes enſued between them. When *Harchin* ſaw that he could not accompliſh his deſign, he propoſed to treat with the Coſſacks, and offered to come to their camp, if they would ſend one Coſſack as an hoſtage for him; which they granted. He demanded, That they ſhould not intirely ruin the *Kamtſchadales*, and promiſed that for the future they would all live peaceably, only deſiring that they would allow him to go and prevail upon his friends and relations to conſent to this agreement; which being granted, he ſent word, that he could not prevail with them to make peace; and that even his own brother, and a chieftain, *Javatche*, who had accompanied them, had refuſed to return.

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The next day *Harchin* came to the bank of the river with ſome other chiefs, and deſired, that the Coſſacks would ſend a boat to bring him over, and give him two Coſſacks in hoſtage; which they agreed to: but no ſooner was he come over than they made him priſoner, and ordered the hoſtages to throw themſelves into the river, and ſwim over, while they fired upon the *Kamtſchadales* on the oppoſite bank, who, when their chief was made priſoner, preſently ſeparated; but, being purſued by different parties, moſt of them were deſtroyed. The chieftain *Teghil*, having defended himſelf a great while, at laſt murdered his wife and children, and killed himſelf; the chieftain *Chugotche*, in vain ſolliciting the inhabitants upon the river *Koſeretſha Shapina* to join him, was in the end murdered by them. After this rebellion, which appeared at firſt very dangerous, and threatened the intire deſtruction of the Coſſacks, was quieted by the arrival of ſuccours, things continued in pretty good order at *Kamtſchatka* until the year 1740, when the *Ruſſians* had ſeven people killed by the natives.

When this rebellion was over, orders were ſent as ſoon as poſſible to Major *Merlin*, with another officer and ſome regulars, together with Major *Paulutſkoy*, to inquire into the cauſe of this rebellion, and the murder of the *Japaneſe*, and to ſend the report thereof to *Jakutſki*; he was at the ſame time to build a new fort, which he did a little lower than the mouth of the river *Ratuga*: this was called the lower fort of *Kamtſchatka*. Having examined into the cauſe of the rebellion, three of the *Ruſſians* were found guilty of death and executed; and two of the chief rebels, with ſome others, both Coſſacks and *Kamtſchadales*, were puniſhed. All the natives, whom they had either taken priſoners, or had made ſlaves of, were reſtored to their liberty. Thoſe *Kamtſchadales* who were put to death, ſeemed to go to execution without the leaſt concern, and under the torture they were ſcarcely heard to moan; nor could they force them to confeſs any thing more than what they had done voluntarily before. ſes

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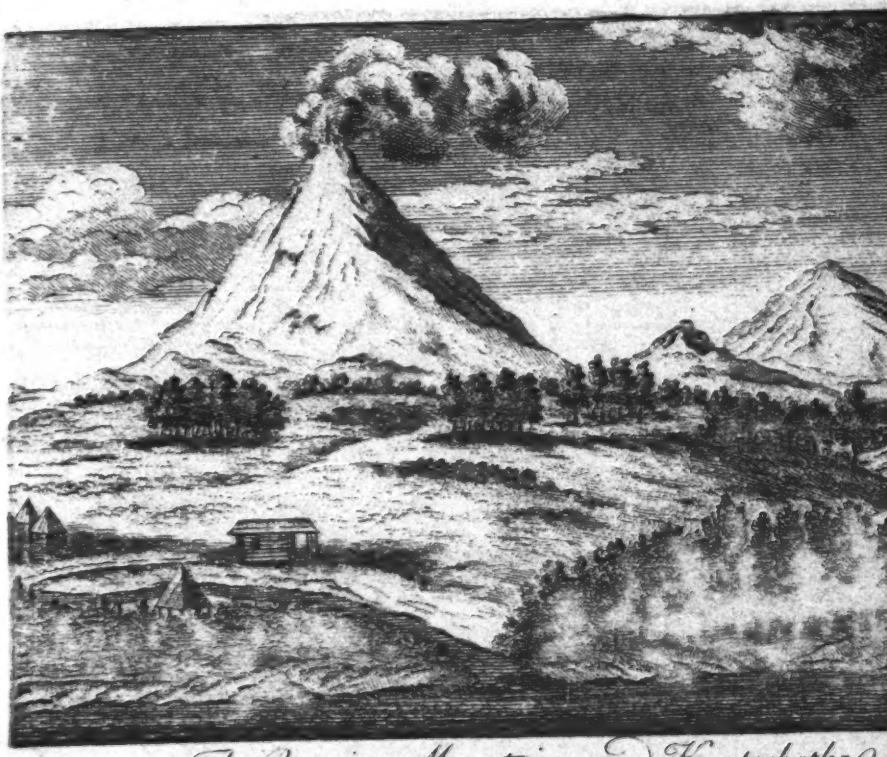

The Burning Mountain named Kamtschatka.

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The Lower Kamtschatka Fort.

Facing P. 265

The upper fort of *Kamtſchatka* was the firſt built, and for ſome years reckoned the principal, as the chief commiſſary lived there. It ſtands upon the left bank of the *Kamtſchatka*, near the mouth of the little *Kaly*, about 69 verſts from the riſe of the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſcheretſkoi* fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper fort, and ſtands upon the ſame ſide of the river, about 30 verſts

from its mouth. The fort is a parallelogram made with paliſades; its breadth is 40, and its length 42 fathoms. In the fort is a church dedicated to the Virgin *Mary*, the office and magazine for the taxes, ſtores, and the commiſſary's houſe. Theſe are all built of larch wood, and much neater than in any other fort. Without the fort are 39 private houſes, beſides the publick houſe and diſtillery. The male inhabitants are 92, of all ranks.

This fort, with regard to the neceſſaries of life, may be reckoned preferable to any other. Here the inhabitants catch plenty of fiſh, which they dry and ſalt in ſufficient quantities for proviſion through the whole year: here they have wood enough, not only for building their houſes, but alſo for building ſhips, to which the river ſerves as an harbour; and by its proximity to the ſea they boil ſo much train oil and ſalt as to ſupply the other forts. Game is here ſo plenty, that the pooreſt Coſſack ſeldom dines without a ſwan, gooſe, or duck; and through the whole winter, in the ſprings, they catch freſh fiſh. Wild berries of all ſorts are here in great abundance, which the inhabitants lay up in ſtore for the winter, and which next to fiſh is the greateſt part of their ſuſtenance; and the beſt *Kamtſchatka* ſables are caught near the river *Tegbil*. All the goods which they get from the *Koreki*, ſuch as deer-ſkins, and even the fleſh of the deer itſelf, are cheaper here than any where elſe: beſides, this is a moſt fruitful ſoil, where they may cultivate corn of all ſorts. The only inconvenience that they have is, that both *Ruſſian* and *Chineſe* goods are dearer here than at any other fort, which is owing to their land-carriage from the *Bolſcheretſkoi Oſtrog* hither, which coſts four rubles a pood.

The fourth fort was built upon the bay of *Awatſcha*, in the year 1740; and inhabitants were brought hither from the upper and lower *Kamtſchatka* forts. The houſes are tolerably good, particularly thoſe which were built for the people of the *Kamtſchatka*

ARCHÆOLOGICAL INVESTIGATIONS IN KAMCHATKA

CHAPTER I

HISTORY

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In 1632 the Russian conquerors of Siberia settled on the Lena River and built a fortified town, Yakutsk, which they used as a central base for further military expeditions. In the course of these expeditions they reached Okhotsk and Bering Seas on the east, the Arctic Ocean on the north and the Amur River on the south.

In the year 1649 the fortress Anadyrsk, on the river of the same name, was founded by the Cossack Deshnev, who had traveled in boats from the mouth of the Kolyma River through Bering Strait to the mouth of the Anadyr River.

Since the founding of the fortress Anadyrsk, Cossack parties have imposed tribute on the Koryak living to the south of Anadyr. From the Koryak the Cossacks learned that the best peltries, such as sables, sea otters (*Enhydris marina*), and sea bears (*Otaria ursina*) were obtained by the Koryak themselves through exchange from Kamchatka. This discovery led to an expedition to the Kamchatka Peninsula.

In 1696, Atlassov, commandant of the fortress Anadyrsk, sent a detachment under the command of the Cossack Morozko to the peninsula of Kamchatka to verify the reports of its wealth in peltries. The following year, Atlassov undertook the journey himself. He sent Morozko with his detachment to the Bering Sea, while he advanced along the coast of the Penzhina Bay, gathering tribute from the crossing country. Morozko did likewise on the coast of Bering Sea. Atlassov and Morozko met on the Tighil River where the Kamchadal territory begins. They advanced together, reached the Kamchatka River, received tribute from the Kamchadal who were living in the valley of the Kamchatka River, and founded the fortress Verkhne-Kamchatsk.

Thus the conquest of Kamchatka was begun. When the Russians had settled in Kamchatka, the Peninsula, as well as the Koryak territory to the north of it, became dependent upon the fortress Anadyrsk. The sea route from Okhotsk to Kamchatka was at that time unknown, and the land journey through the territory of the turbulent Koryak was considered quite impossible. In those days Kamchatka was the most valuable acquisition of the Russian Government in the Far East, and communications of the Yakutsk Administration with Kamchatka

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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had to be maintained over a long and dangerous route. The way from Kamchatka to Yakutsk lay through the entire Koryak country to the Anadyr River; from there to the Kolyma River over the Stanovoi Mountain; and from there the route lay over the Indighirka and the Yana countries and the Verkhoyansk range of mountains. A great number of the Cossack parties, which started from Kamchatka with tributes of furs, never reached the fortress Anadyrsk. The Koryak killed the Cossacks from ambush and kept the furs. Transports, that had safely reached Anadyrsk, would arrive in Yakutsk three years after they had left Kamchatka. Cossack detachments carrying provisions, gunpowder, arms and cannons from Yakutsk to Kamchatka were also harassed by Koryak attacks. To put an end to such conditions a direct sea-route from Okhotsk to Kamchatka had to be discovered, and the Koryak had to be finally subdued in order that the winter route might be rendered safe.

Until the sea-route from Okhotsk was discovered, the Cossacks of the Kamchatka Peninsula tried to utilize the Pacific Ocean route to shorten the dangerous land trip from Kamchatka to Anadyrsk. They built large boats of boards, and starting from the mouth of the Kamchatka River traveled northward to the mouth of the Alutor River. In 1752, in order to facilitate these expeditions, the Cossacks built a settlement, Alutorsk, protected by a wall, at the mouth of the Alutor River, where Cossack parties could find shelter against the attacks of the Alutor Koryak. During the winter, Cossacks traversed the tundra from the fortified settlement, Alutorsk, to the mouth of the Oklan River, a tributary of the Penshina River, on which a fortress, Oklansk, was built. From Oklansk they traveled northward along the valley of the Penshina River and, having traversed the Nalghinsk Mountains, arrived at the Anadyr River. That part of the way from Kamchatka to the Anadyr which lay between Alutorsk and Oklansk was of course not safe from unexpected attacks of the Koryak.

The unsuccessful attempt of 1712 to reach Kamchatka by sea from Okhotsk was followed in 1713 by a special ukase of Peter I, ordering that a sea-route to Kamchatka be found. All attempts, however, failed until 1716, when a successful journey was made from Okhotsk to Tighil in a large boat. Thus the dependence of Kamchatka on the Anadyr route was brought to a close, and communication between the peninsula and Yakutsk was henceforth carried on directly by way of Okhotsk.

THE BERING EXPEDITIONS

The discovery of a sea-route to Kamchatka gave an impetus to geographical explorations in Bering Sea. In 1726 the first expedition of Bering was undertaken, followed by a second in 1737–45. In the interval between these expeditions, which were scientific in character and had no direct relation to the administration of Kamchatka, the Kamchadal were finally subdued.

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Professor Golder[1] is of the opinion that Peter I, on his own initiative, set on foot Bering's Expedition in order to determine whether Asia is united with or

[1] F. A. Golder, *Russian Expansion on the Pacific, 1641–1850*, Cleveland, 1914, p. 133.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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The Russian Government repeatedly tried to introduce agriculture and gardening into Kamchatka. For this purpose peasants from Southern Siberia and European Russia were transferred several times to Kamchatka, but all experiments have failed and the imported husbandmen turned to fishing and hunting. Only in the valley of the Kamchatka River, near the village Kluchevskoye, small sowings of barley are still being made, but without any economic importance.

Experiments with gardening appeared to be more successful. Potatoes grow all over Southern Kamchatka where the digging of edible roots had almost ceased. Turnips grow there and the inhabitants of Kluchevskoye also grow cabbage, which heads well.

CLIMATE OF KAMCHATKA

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The following data on the climate of the Kamchatka Peninsula are based on observations made in 1908–1909 by the members of the Meteorological Division of the Riaboushinsky Expedition headed by Dr. V. A. Vlasov.[1]

As climate is one of the most effective nature-agents regulating human life, data concerning three chief regions of the country will be given: the western coast, the eastern coast and the central part, represented chiefly by the valley of the Kamchatka River. The western and the eastern shores represent maritime climates, while the climate of the central part may be characterized as a continental one.

The climate of the western coastline of Kamchatka is more severe than that of the eastern, due to the cold Okhotsk Sea. During the winter cold winds prevail, blowing from the Siberian continent, the region of the great Siberian anticyclone. A late spring and a cold summer characterize the climate of the western coast. On the eastern shore of Kamchatka, under the moderating influence of the Pacific Ocean, frosts in the winter are not so severe. Rain and snowfall are more abundant. However, the cold current arriving from the Bering Strait and the amount of ice which it brings delay the beginning of summer and reduce its temperature.

The climate of the central Kamchatka, confined by its western and eastern mountain ridges, i. e., the valley of the Kamchatka River, distinguishes itself by all the peculiarities of a continental climate, having a cold winter and a comparatively warm summer. In order to demonstrate what has been said of the three climatic regions, mean annual figures for three points are given: for Tighil on the western shore, Petropavlovsk on the eastern shore and Kluchevskoye in the valley of the Kamchatka River.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
Tighil	−20.0	−19.8	−13.6	−2.2	2.4	6.2	11.3	12.1	7.0	−1.0	−7.4	−17.2	−3.5
Petropavlovsk	−10.9	−11.2	− 7.0	−1.6	3.1	7.9	11.8	13.5	9.8	4.2	−1.8	− 6.6	1.0
Kluchevskoye	−16.4	−15.2	−11.3	−1.5	4.6	8.5	12.15	13.1	8.8	−1.4	−7.8	−13.0	−2.0

[1] See V. A. Vlasov, The Kamchatka Expedition of F. P. Riaboushinsky organized by the Imperial Russian Geographical Society, Meteorological Division, vol. 1, part 1, *On the Climate of Kamchatka;* part 2, on *The Temperature of the Waters.* Moscow, 1916 (in Russian). Centigrade thermometers were used.

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
● 177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
199 villages (between Amanino and Sopochnöye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saltteries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

175 sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not
669 being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula.
R. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were
177.66 successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

157 The old Kamchadal were proud, independent, inclined to wrath; their passions
761 were easily aroused; they took offense readily and tried to avenge themselves by any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

651 In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropav-
669 lovsk was subsequently established. The Avacha Kamchadal were informed of
R. the imminent arrival of the collectors. They built a solid blockhouse on posts with secretly lifting doors.[1] The Russians were met with simulated pleasure.
● 177.65 Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and
669 so all in the building perished together.

Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a
761 tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and now as storehouses.

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669 761 was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

157 177 181 The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

651 R. 177.65 The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 387.

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particularly tragic, as the sable, for whose fur the Russian demand was greatest, was an animal which inhabited Kamchatka and not the territories to the north of it.

The question as to how tribute was to be levied was later put on a definite basis by the so-called First Tribute (Yassak) Commission of 1762–1766. The reform introduced by the commission was based on the following principles: (1) The tribute is to be paid by a representative for the clan or group; the further apportionment of the tribute among the individual hunters is left to the natives themselves. (2) The representative of the group is to deliver the tribute in person to the administrative center; collectors are abolished. (3) Subject to the tribute are native men from sixteen to sixty years of age, who are to be called "workers" or "tax souls." (4) Payment may be made in furs or in money, the amount being calculated in money for each person, and varying in the case of fur payments according to locality, the nature of the animals and the current valuation of the latter. These principles, with some additions and a general lowering of the amount of tribute to be paid, were accepted by the Second Tribute Commission of 1828–1835. The age of workers was limited to men from eighteen to fifty. The number of workers of every clan was fixed by the census. The last census for this purpose was taken in 1859.

The fur-tribute, however, continued to be levied and to serve as a way to abuses for officials until the February revolution of 1917, when the Provisional Government under Kerensky abolished altogether this form of taxation of the Siberian natives.[1]

[1] The author contributed to the decree by his articles in the press on the Yassak question.

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St. Petersburg and were presented to the Empress Anna Ioanovna. In the same year they were baptized; Gonza was named Damian Pomortzev, and Soza, Kosma Shultz. They were charged to teach Japanese to the students of the Academy of Sciences. Neither lived long—Soza died in 1736 at the age of 43 and Gonza in 1739, being only 21.

Some years later (1745) other Japanese wrecked at Kamchatka's shore were brought to St. Petersburg for the same purpose, but the Japanese were simple fishers and hardly could be used as teachers.[1] Such wreckages of Japanese ships repeatedly took place about that time. The explorer Lesseps mentions nine Japanese whose ships were wrecked at the Aleutian Islands in 1788 and whom he brought to Kamchatka.[2]

THE UPRISING OF THE KAMCHADAL

THE CAUSES OF REVOLTS

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The causes of revolts of the Kamchadal were the cruelty, violence, greediness with reference to fur-skins, and the licentiousness of the Cossack chiefs and soldiers on the peninsula. On the other hand frequent mutinies of Cossacks against their chiefs and the incessant feuds between the chiefs and their parties could not inspire respect from the oppressed natives. Numerous local revolts had taken place from the very beginning of the occupation of the country by the Cossacks. Rebels and victors were equally merciless in their encounters. A general uprising of the Kamchadal which had been fomenting for a long time broke out in 1731. The Kamchadal were ready to rise before that date but did not dare to do so.

In 1729 Kamchatka was visited by the first scientific expedition of Bering and his companions who had armed crews. The ship *Gabriel*, with a crew of one hundred men belonging to the military expedition of the Cossack chief, Afanassy Shestakoff, remained in Nishne-Kamchatsk until July 1731. According to the original plan of Shestakoff's military expedition, the *Gabriel*, after leaving Okhotsk, was to visit Kamchatka and to proceed from there to the mouth of the Alutor River, where the commander of the expedition, Shestakoff, expected to arrive by land from the shore of the Okhotsk Sea, in order to subdue the Alutor Koryak; from there it was intended that the ship should sail to the mouth of the Anadyr River, exploring the shores on the way, and continue up the river to the fortification at Anadyrsk, which Shestakoff intended to reach by land. But Shestakoff's party was defeated and he himself killed by the Koryak after he had crossed the Paren River. When the news of Shestakoff's death arrived, the *Gabriel* remained in Kamchatka, awaiting further orders. In June 1731 she was ordered to proceed to the Anadyr and to enter the service of Pavlutsky, Shestakoff's lieutenant.

As soon as the *Gabriel* had weighed anchor and gained the open sea, the Kamchadal attacked the fortress Nishne-Kamchatsk and took possession of it. Presently a detachment was despatched to take Verkhne-Kamchatsk and Bol-

[1] W. W. Barthold, *Die geographische und historische Erforschung des Orients mit besonderer Berücksichtigung der Russischen Arbeiten*, Leipzig, 1913, p. 120.

[2] M. de Lesseps, *Travels in Kamchatka*, English Translation from French, vol. 1, London, p. 206.

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175 sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not
669 being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula.
R. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were
● 177.66 successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

157 The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by
761 any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

651 In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropav-
669 lovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts
R. with secretly lifting doors.[1] The Russians were met with simulated pleasure.
177.65 Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

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The history of the further conquest of Siberia is of no very great interest. Shortly after the arrival of the Czar's forces Yermac was surprised by a body of Kuchum Khan's adherents, and was drowned in his attempt to escape, and the Russians were for the time being driven out of the country. It was only for a brief period. They returned in greater strength, and rapidly reduced the Tartars to submission. Thenceforward their progress eastward was almost unchecked. The rude tribes were unable to stand against the superior discipline and arms of the more civilised nation, and in less than a century the Muscovite and the Celestial faced one another in the provinces of the Amoor. The hostilities that ensued were not of long duration. The Czar was wise enough to foresee that a protracted war with such a powerful nation as the Chinese could by no possibility end in his favour, and ultimately a treaty was signed at Nerchinsk in 1689, by which a system of commerce was established between the two nations, and the advance of the Russians checked in south-east Siberia.

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No such check had, however, occurred in the north-east, and even before the Nerchinsk Treaty the Russians had established themselves at Anadyrsk,—practically, although not actually, the Ultima Thule of the Asiatic continent. Here a fort was built, and a governor appointed, who was instructed to collect the tribute of furs from the natives, and to inform himself of the countries beyond and to the south of his district. At that time the half-fabulous Strait of Anian was the supposed boundary of Asia, and Kamschatka, of which the Russians had only dimly heard through the medium of the natives, was believed to be joined to the northern portion of Japan. The existence of Bering's Straits was not proved until nearly forty years later, but hardly a tenth of that time had elapsed before the Cossack troops had penetrated the peninsula and built a fort at Werchni Kamschatka, in the very heart of the country.

To whom the honour of the actual discovery of Kamschatka is due is a disputed point, but the claims of one Theodot, a Russian

[in 1689--analyst]

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trader, seem to rest upon something more than mere tradition. This individual is said to have sailed down the Bova River to the Polar Sea, and to have made his way thence by way of Bering's Straits to Kamschatka. Here he wintered, and in the following summer rounded the southern point of the peninsula, and entered the Sea of Okhotsk. He is said to have been killed by the Koriaks on his return overland to Anadyrsk, or to have died of scurvy, but the accounts of the expedition are both scanty and uncertain, and nothing was known of the country he was said to have discovered until the end of the seventeenth century.

In 1697 Vladimir Atlasov was sent from Yakutsk to take the command of the district of Anadyrsk, and in the following year he despatched Luke Moroskoi, a Cossack, with a guard of sixteen friendly natives, to collect the tribute from the country lying to the south. On their return they reported that they had penetrated the north of Kamschatka, and Atlasov, tempted by their description of the country, resolved on conquering it without delay. He accordingly started with a force of sixty Cossacks and about the same number of natives, and sending half under Moroskoi towards the Pacific, he marched southwards to the River Tigil. He met with but slight resistance from the Kamschatkans themselves, but his own natives revolted, and killing three of his Cossacks and wounding several others, they were with difficulty overpowered. Atlasov effectually prevented the recurrence of such an event by putting the remaining rebels to death, and notwithstanding the greatly reduced number of his followers, eventually reached Tigil, where he effected a junction with the second party under Moroskoi. The indomitable courage and resolution with which this mere handful of men ventured into the midst of a hostile nation, in a country which is one of the wildest and most impassable in the world, is worthy of the highest admiration. In spite of having reduced the tribes at the north of the peninsula, they had no thought of return. From Tigil they marched to the Kamschatka River, and ascending it almost to its source, built a fort upon its banks,

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where the village of Werchni Kamschatka now stands. This was garrisoned with fifteen Cossacks, and the remainder of the force returned in safety to Anadyrsk after an absence of two years.

The tribute obtained as the result of this expedition was a very valuable one, consisting of over three thousand sables in addition to other furs. This booty Atlasov himself conveyed to Moscow, and, as a reward for his services, was made Chief of the Cossacks at Yakutsk, and ordered to return at once to Kamschatka. Unfortunately for him, he fell into temptation by the way. A Russian merchant was unlucky enough to meet his party, and proved too tempting a morsel for the conqueror of the peninsula. The predatory instinct prevailed, and Atlasov eased him of the Chinese goods with which he was returning laden. Justice, however, seems in this case to have overtaken the delinquent rather more rapidly than is usual in the dominions of the Czar. He was at once seized and thrown into prison, where he remained for nearly five years.

During this period affairs in the newly-conquered country were by no means progressing as smoothly as might have been expected from the ease with which it had been annexed. Forts had been built both on the Yelofka River and where Nischni Kamschatka now stands, but the natives had given much trouble, and had killed several of the tax-gatherers, while the garrison of the upper fort, after remaining there for three years, had been murdered to a man on their homeward march to Anadyrsk. Upon the return of Atlasov, however,—for he had been invested with full authority, as before, on his release from prison in 1705,—a force was at once despatched to punish the rebels, and the Cossacks for the first time appear to have reached Avatcha Bay, where they encountered a body of eight hundred Kamschatdales. Certain of victory, the latter had provided themselves with ropes to secure their prisoners, but though the Cossacks were taken by surprise and greatly outnumbered, they eventually gained the day, and the natives were put to flight with great slaughter.

The Russians were now permanently established in the

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peninsula, and as they had been much increased in strength by reinforcements sent from Yakutsk, the tribute levied on the natives became more valuable. But the lawless nature of the Cossacks effectually prevented a peaceful settlement of the country. Atlasov, who was probably no worse a character than his subordinates, openly appropriated the Government tribute, and was guilty of such gross cruelties to the natives and his own Cossacks that the latter seized and imprisoned him in 1707. Intelligence of the rebellion having reached the Yakutsk authorities, Peter Tcherekov was at once despatched to restore order, but the difficulties of travel and other causes combined to delay him, and it was not until two years later that he reached Kamschatka. Shortly afterwards he was joined by Joseph Mieronov, who had been sent to supersede him; and thus, in 1711, there were no less than three governors in the country at the same time. This *embarras* of rulers did not trouble the mutineers long. Tcherekov and Mieronov were murdered by their Cossack guard, and Atlasov met his fate at the hands of his own men—a punishment which, it must be confessed, he only too richly deserved.

The mutiny was indirectly the cause of further discoveries in the peninsula. The Cossacks became so afraid of the consequences of their crimes that they resolved, if possible, to expiate them in the eyes of the authorities by marching against the natives in the south-west, who had hitherto refused to pay tribute. At the same time they sent a letter to Yakutsk, accusing the murdered men of having systematically embezzled the tribute. Their expedition was completely successful. They descended the Bolchaia-reka, destroyed several of the fortified villages, killed great numbers of the natives, and finally built a fort upon the present site of the settlement of Bolcheresk. The natives were thus completely reduced, and the mutineers added further to the knowledge of the country by visiting the most northern of the Kurile Islands—on which no Russian had ever previously landed—and compelling the inhabitants to pay tribute.

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Onsiforov, the ringleader of the mutineers, returned to the Kamschatka River in 1712, and partly in consequence of these services, partly, no doubt, because of the strong force by which he was attended, his various misdeeds were passed over in silence, and he was again employed in expeditions against the natives. The country was at this time in a condition of the greatest insecurity. The Cossacks, under little or no control, killed and pillaged the Kamschatdales at every opportunity, and the tax-gatherers were constantly murdered in retaliation. Frequent mutinies took place, and from the state of anarchy into which the country had fallen, no tribute reached Yakutsk between the years 1707 and 1714. The exploration of the country nevertheless continued. More of the Kurile Islands were discovered, and in 1715 communication by sea was established between the ports of Okhotsk and Bolcheresk, which led to the discontinuance of the overland route to Yakutsk *viâ* Anadyrsk. Not only was the former far more direct and rapid, but it was also attended with much less risk; the attacks of the hostile Koriaks and Tchuktchis, which rendered the sledge journey extremely dangerous, being thereby avoided.

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Hitherto the attention of the Russians had chiefly been engaged in the investigation of the country lying to the south of Anadyrsk. But the question of the continuity of Asia and America had long been occupying the mind of Peter the Great, who was at that time Czar, and he resolved that an expedition should be undertaken with that aim. Accordingly, with his own hand, he drew up instructions, in which he ordered that ships should be constructed in Kamschatka, that they should direct their course northwards with the object of setting at rest the question of the existence of a strait between the two continents, and that they should endeavour to extend the Russian dominions wherever possible. Before further action had been taken the reign of Peter the Great was terminated by death, but the Empress Catherine, on coming to the throne, at once proceeded to carry out the instructions of the Czar. In 1725 the first expedition started, and Bering

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to examine the shores of the supposed straits as soon as they should be free of ice in the following summer. They left the river for this object on the 5th of June, 1729, but owing to the continued prevalence of strong north-east winds, against which the *Gabriel* could make no headway, the main idea of the voyage was abandoned, and Bering made for Okhotsk, whence he proceeded overland to St. Petersburg. His second voyage was thus neither successful nor disastrous. The third, and final one, was both.

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It was during the absence of Bering that an event occurred which, but for a fortunate accident, would in all probability have resulted in the murder of every Russian in Kamschatka. The natives had for a long time cherished the idea of ridding themselves of their conquerors by a preconcerted rising throughout the country. In 1731 a more favourable opportunity presented itself than they could have anticipated. The departure of Bering and his people had cleared the Kamschatka of the most formidable body of their enemies, and the Russian forces in the peninsula had been still further weakened by the absence of a great number of Cossacks, who, under Captain Paulutsky, had been sent to the north to suppress a rebellion of the Tchuktchis. At the same time the commissary Shacurdin sailed from the Kamschatka River for Anadyrsk in charge of the annual tribute. The moment was seized by the Kamschatdales, who throughout the country were in readiness for the revolt. They sailed up the river, killing every Cossack they encountered, and Nischni Kamschatka was carried in the night by surprise. Every soul was massacred, with the exception of two or three who made their escape under cover of the darkness, and paddling down the river, eventually reached the coast. Here, to their great joy, they found the two vessels which had left for Anadyrsk, but had been compelled to return by strong head winds. Measures were immediately taken to regain possession of the fort. The leaders of the rebellion were Harchin —a Toyune or chief of the Yelofka River district—and a Kluchi Kamschatdale named Chugotchi. The village of Nischni had fallen

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to Harchin's forces, and Chugotchi, having murdered all the Russians in his own district, marched to join him. Hearing of the return of Shacurdin's ships, they entrenched themselves in the fort and awaited the Russian attack. It would have been better for them had they accepted the terms offered by their opponents, but they refused to surrender. The place was retaken with great slaughter. Hardly a man escaped alive, and thus the revolt, which at one time bid fair to spread throughout the peninsula, was checked almost at its outset. It was the last struggle engaged in by the natives, and thenceforward the country remained in a condition of uninterrupted peace.

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It was not until 1732 that proposals were made for the despatch of another exploring expedition to the far east. They emanated from Bering himself, who, with his two lieutenants Spangberg and Tschirikov, was anxious to push across to the American coast, and trace it northward to the strait that now bears his name. Another point too remained to be elucidated. To the south-east of Kamchatka in the charts of Delisle and others of that day an appearance of land was indicated, and described "*Terre vue par Jean de Gama, Indien, en allant de la Chine à la nouvelle Espagne.*" It was intended to search for this mythical land before proceeding to America,—an intention that, unluckily for the fate of the explorer and his comrades, was ultimately carried out,—and emboldened by the success of his earlier voyages, Bering ventured to lay his proposals before the Empress.

They were at once acceded to, and Anne, who appears to have been as anxious to extend the dominions of Russia as her predecessor, resolved upon a simultaneous system of exploration over a vast extent of country. Special attention was to be directed to the possibilities of a north-east passage along the coasts of the Polar Sea. Eight additional lieutenants were appointed, of whom three were to be engaged in this work. Spangberg was to proceed to Okhotsk, where two ships were to be built to enable him to reach Japan, while the two needed for Bering's voyage were also to be

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 ſent be made of it. The ſwell of water had been ſo great as to overflow the ſluice, and to ſpread itſelf over a part of the plain where it was frozen. The ſoil appeared to be good, and the country round it to be very pleaſant. I queſtioned the Coſſacs upon the productions of their canton, where I conceived every ſpecies of corn might be cultivated with ſucceſs. They told me that their laſt harveſt had, both in quantity and quality, ſurpaſſed their hopes, and was not inferior to the fineſt harveſts in Ruſſia; two pouds of corn had produced ten.

563 Arrived at Milkoff, I was aſtoniſhed no
361 longer to ſee either Kamtſchadales or Coſ-
241 ſacs, but an intereſting colony of peaſants
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177 whoſe features and addreſs told me they
.24 were not a mixed breed. This colony was ſelected in 1743, partly in Ruſſia and partly in Siberia, among the primitive inhabitants, that is, among the huſbandmen. The view

of

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of adminiſtration, in ſending them into this country was, that they might clear the land and make experiments in agriculture; hoping that their example and ſucceſs would inſtruct and encourage the indigenes, and induce them to employ their labours in this advantageous and neceſſary art. Unfortunately their extreme indolence, which I have already deſcribed, little correſponded with the wiſe intentions of government; and ſo far are they from pretending to any rivalſhip, that they have never derived the ſmalleſt advantage from the examples that are before their eyes. This extreme ſluggiſhneſs of the natives is the more painful to an obſerver, as he cannot but admire the induſtry of theſe active emigrants, whoſe labours have been attended with ſuch beneficial effects. Their habitations, ſituated upon the Kamtſchatka, ſeem to ſhew that they live at their eaſe. Their cattle thrive well from the great care they take of them.

I obſerved

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I obſerved alſo that theſe peaſants had in general very much the air of being contented with their ſituation. Their labour is profitable, and not exceſſive. Every man plows and ſows his field, and having only his capitation to pay, he reaps abundantly the fruit of his exertions, which a fertile ſoil repays him with uſury. I am convinced that greater advantages might be derived from this ſource, if the cultivators were more numerous. The harveſt conſiſts chiefly of rye, and a very ſmall quantity of barley. This colony has nothing to do with the chace. Government extended its cares ſo far as to prohibit it, that their labours might be wholly devoted to agriculture, and that nothing might divert their attention. The prohibition however, I could perceive, is not very ſcrupulouſly obſerved. Their chief is a *ſtaroſte*, appointed by adminiſtration, and ſelected from the old men of the village, as the name implies. His buſi-

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neſs is to inſpect the progreſs of agriculture; to preſide over their ſeed time and their harveſt, to fix the preciſe period when they are to take place; in ſhort, to ſtimulate the negligence, or encourage the zeal of the labourers, and particularly to maintain the ſpirit of the eſtabliſhment and a good underſtanding among them.

000 Being deſirous of going to Machoure, to ſpend a day with the baron de Steinheil, I left M. Kaſloff at Milkoff, and ſet out twenty four hours before him, that I might occaſion no delay in his journey. To travel with the greater expedition I made uſe of a ſmall ſledge. The roads were no better or leſs obſtructed with ſnow than what we had before experienced, and I was therefore unable to make the ſpeed I intended, notwithſtanding my precaution. The firſt vil-
361 lage I came to was Kirgan. Before I reached it, I paſſed a number of houſes and

balagans

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000 Kreſtoff, towards the village of Klutcheſs-
kaïa, which is thirty werſts from it.

The weather, which, ſince our departure from Apatchin, had been very fine, though cold, changed all of a ſudden in the after-
133 noon. The ſky became clouded, and the wind, which roſe in the weſt, brought us a heavy ſnow. It extremely incommoded us, and prevented me from examining as I could have wiſhed, the volcano of Klutchefskaïa, which I had ſeen at the ſame time with thoſe of Tolbatchina. As far as I could judge, the mountain that carries it in its womb, is conſiderably higher than the other two. It continually throws up flames, which ſeem to aſcend from the midſt of the ſnow, with which the mountain is covered to its very ſummit.

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Upon the approach of night I came to the village of Klutchefskaïa. The inhabi-

tants

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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tants are all Siberian peasants, from the neighbourhood of the Lena, and were sent about fifty years ago into this part of the peninsula to cultivate the land. The number of males, including men and children, scarcely exceed fifty. The small-pox attacked only those who had not before been affected with it; but it carried off more than one half of them. These labourers are less happy than those who live in the neighbourhood of Verknei-Kamtschatka. The quantity and quality of their last harvest, both rye and barley, exceeded their hopes. These peasants have many horses belonging to them; in the mean time there are some which are the property of government.

This ostrog is tolerably large, and appears the more so from being divided into two parts, about four hundred yards from each other. It extends principally from

7:Lesseps T-3 (1787-88)1790 Kamchadal

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eaſt to weſt. To the eaſtward is ſituated the church, which is built of wood, and in the Ruſſian taſte. The majority of houſes are better conſtructed, and are more clean, than any I have yet ſeen. There are alſo ſome conſiderable magazines. The number of balagans is ſmall, and they are very unlike thoſe of the Kamtſchadales; their form is oblong, and their roof, which has the ſame declivity as ours, reſts upon poſts, which ſupport it in the air.

The Kamtſchatka paſſes at the bottom of the oſtrog; it is never entirely frozen in this part. In ſummer it frequently overflows and enters the very houſes, though they are all of them built upon an eminence.

Four werſts eaſt of the church of Klutchefskaïa, is another *zaimka*, or little hamlet, inhabited by Coſſacs or labouring ſoldiers,

7:Lesseps T-3 (1787-88)1790 Kamchadal

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diers, whose harvests belong to government: but I cannot get out of my way to examine it.

I made a very short stay at Klutchefskaïa, my impatience to see Nijenei inducing me to leave it the same evening in order to reach Kamini, a Kamtschadale village, twenty wersts farther. I arrived at midnight, but merely passed through it.

Before day I was at Kamokoff, twenty wersts from Kamini. I soon arrived at Tchokofskoi, or Tchoka, which is twenty-two wersts farther. From thence to Nijenei, the distance is the same, and I travelled it equally in a few hours. I had the pleasure of entering a little before noon into this capital of Kamtschatka, which is seen at a considerable distance, but its appearance is neither striking nor agreeable.

22: Guillemard T-2 (1882) 1886 Kamchadal

563 The head-man of the village received us on landing—a person
622 of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167 Melcova owes its origin to an experiment. With the view of
563 encouraging the cultivation of the land and of making something
241 more of the country than a mere hunting district, where the in-
361 habitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian
R peasants were settled here in 1743, who were to devote themselves
177 entirely to agriculture. The result has been to a certain extent
.24 successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

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ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavloſska*.

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The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

342 R 177 .34 they ſhould be brought gradually to reſemble the Ruſſian peaſants, they are prohibited, in this ſouthern part of Kamtſchatka, from conſtructing any more *yourts*, or ſubterraneous habitations; theſe are all deſtroyed at preſent*, a few veſtiges only remain of them, filled up within, and appearing externally like the roofs of our ice-houſes.

342 The balagans are elevated above the ground upon a number of poſts, placed at equal diſtances, and about twelve or thirteen feet high. This rough ſort of colonnade ſupports in the air a platform made of rafters, joined to one another, and overſpread with clay: this platform ſerves as a floor to the whole building, which conſiſts of a roof in the ſhape of a cone, covered with a kind

* I met with ſome afterwards in the northern part, which I took care to examine, and have deſcribed in their proper place.

of

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
415 they are ingenious enough to make ſpears and arrows out of the
R. iron pots and kettles which they buy; and they are ſo dextrous
177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
439 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

7: Lesseps T-3 (1787-88) 1790 Kamchadal

436 R. 177.43 of ten roubles; the rouble, and half rouble. There are very few ſilver coins below this value; a proof that no article of merchandize is expected to produce leſs than half a rouble. Copper and paper money have not yet reached this peninſula. A variety of old ſilver coins of the times of Peter I. Catherine I. and Elizabeth, abound here. A conſiderable branch of commerce may be made of them; the ſilver is purer and more valuable than that of common coins.

465 R. 177.46 The pay of the ſoldiers or Coſſacs is fifteen roubles a year. The officers ſent by government to ſo diſtant a country, receive double ſalaries.

631 R. 177.63 The peninſula of Kamtſchatka, when major Behm preſided at Bolcheretſk, was under the juriſdiction of the government general of Irkoutſk. Upon the departure of this governor, whom the Engliſh ſaw upon

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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merce, and their decifions are either confirmed or annulled by the court to which they are carried by appeal. The Ruffian code of laws is the only one that is attended to; it is too well known to require that I fhould enter into particulars; and I could only repeat what has been already related by various hiftorians and travellers better informed upon the fubject than myfelf.

I ought however to add, that the property of the Kamtfchadales devolves, of courfe, upon their deceafe, to the next heir, or to whomfoever it is bequeathed. The will of the teftator is equally refpected, and as literally adhered to, as it could be with thofe nations of Europe who are moft fcrupulous on the fubject of fucceffions.

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Divorces are neither practifed or allowed among the Kamtfchadales. The Ruffians feem to court their alliance, though it procures

7:Lesseps T-3 (1787-88)1790 Kamchadal

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cures them no particular priviledge. Their motive is obvious. By frequent marriages, it is poſſible that before the end of the preſent generation, the race of the indigenes may be totally extinct.

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The penalty of death, aboliſhed in all the dominions of the empreſs, is never inflicted in Kamtſchatka. In their earlieſt migrations, the Ruſſians, when accuſed of haraſſing the natives, were condemned to the knowt; the Kamtſchadales alſo, for various offences, were liable to this cruel puniſhment; but it is no longer practiced. When the natives are guilty either of petty or capital offences, the puniſhment is whipping. It may be queſtioned whether they have gained by the change. The preſent mode of puniſhing them being more ſimple and expeditious, it is reſorted to with leſs ſcruple, and is liable to frequent abuſe.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

Although their manner of living be most nasty, and their actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

In every *Ostrog*, or large village, by order of her Imperial Majesty, is appointed a chief who is sole judge in all causes, except those of life and death; and not only these chiefs, but even the common people, have their chapels for publick worship. Schools are also erected in almost every village to which the *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

7:Lesseps T-3 (1787-88)1790 Kamchadal

317 but objects cannot be seen through them.
342 The leaves of talc are more clear, and approach nearer to glass; in the mean time they are not sufficiently transparent for persons without to see what is going on within: this is manifestly no inconvenience to such low houses.

622 Every ostrog is presided by a chief, called
554 *toyon*. This kind of magistrate is chosen
R from among the natives of the country,
177 by a plurality of voices. The Russians
.62 have preserved to them this priviledge, but the election must be approved by the jurisdiction of the province. This toyon is merely a peasant, like those whom he judges and governs; he has no mark of distinction, and performs the same labours as his subordinates. His office is chiefly to watch over the police, and inspect the execution of the orders of government. Under him is another Kamtschadale, chosen

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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upon their first arrival in 1779, captain Schmaleff was deputed in his room, and enjoyed for a year the power and satisfaction of doing good to the inhabitants, who entertain for him an equal respect and gratitude. M. Renikin supplied his place in 1780, and was recalled in 1784 for reasons which I am obliged to suppress. At this period the Kamtschatka department was reunited to that of Okotsk. The chiefs and officers of the different ostrogs have since been subject to the orders of the governor at Okotsk, and to the decisions of its courts of justice; these are themselves subordinate and accountable to the governor general residing at Irkoutsk. The present commanding officer, or governor, at Bolcheretsk, which was formerly the capital of Kamtschatka, is now merely a sergeant; the name of the person I left there was *Rastargouieff*, and he had been nominated to the office by M. Kasloff.

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7: Lesseps T-3 (1787-88) 1790 Kamchadal

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The governors in these various ostrogs are not accountable to one another for their administration, not even inferior officers to their superiors; the authority of each is limited to the inhabitants of his own district; which has doubtless induced the empress to appoint an inspector general, *capitan ispravnick*, whose business is to visit every year all the Kamtschadale villages, receive their complaints, examine their differences, judge them, and punish such as are guilty; in short to maintain order and peace among them. It is also a duty of his function to encourage commerce, particularly their fishing and hunting, to inspect the regular payment of their tribute, the stock of provisions of each individual for his own support, and that of his family, the repairs of the bridges and roads, which unfortunately are very few, and kept in very bad order. In a word, the inspector general should consider it as incumbent upon him to introduce

among

7:Lesseps T-3 (1787-88)1790 Kamchadal

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among theſe people the manners and cuſtoms of Ruſſia. This important office was confided, in 1784, to baron de Steinheil, who fixed his reſidence at Nijenei. Affairs calling him elſewhere, he was ſucceeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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The government is not purely military; there are ſome tribunals eſtabliſhed for hearing and deciding cauſes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtſchatka; they are ſubject to the juriſdiction of the court of Okotſk, in the ſame manner as in Ruſſia the magiſtrates of the ſubordinate towns hold from thoſe of the capital, in whom the final deciſion reſts. There is beſide at Bolcheretſk a kind of conſular juriſdiction, or vocal tribunal, called in Ruſſia *Sloveſnoi-ſoud*. The judges are merchants; they take cognizance of all diſputes relating to commerce,

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 river *Ochotſka* has three mouths; the New mouth, the Old mouth, and the *Bulginſkaya* out-let.

The New mouth is dry, except at the time of a great inundation; and even then veſſels cannot enter it. The preſent *Ochotſkoy* fort is built between the New and Old mouths, almoſt upon the beach; and the former, which is now called the old 631 fort, was ſix verſts from the ſea. This place is called *Ochotſkoy* 657 poſt, and commonly *Lama*; and has under its juriſdiction all R *Kamtſchatka*, and the coaſt of the *Penſchinska* ſea to the frontiers 177 of *China*. For which reaſon the tax-gatherers are all ſent out 65 from hence; and the tax, when gathered, is immediately brought from all other places hither, where it is firſt appraiſed, and then ſent into *Jakutzk*. Formerly the *Ochotskoy* fort was poorly inhabited, and under the juriſdiction of *Jakutski*, but it is much increaſed ſince the *Ruſſians* have made this the port for their paſſage by ſea to *Kamtſchatka*.

000 This place is better built than any of the other forts, the houſes being good and regular, particularly thoſe belonging to the government, in which the officers of the *Kamtſchatka* expeditions reſided. In my time there was neither a church nor a fortification, but they were building both. Though the country be as barren as *Kamtſchatka*, yet its inhabitants are better furniſhed with every thing, becauſe goods and proviſions brought from *Jakutski* are ſold here cheaper by one half. Though plenty of corn is brought here, yet no freſh meat is to be got, except wild fowl and veniſon, and that ſeldom. Fiſh in this place is almoſt as plenty as in *Kamtſchatka*, except the *Chaveecha*, which they bring hither from thence. The greateſt want in this place is that of good paſturage near them; therefore the inhabitants cannot breed cattle. They have tried many times to keep them upon the river *Avi*, but with great loſs, moſt of them dying for want of ſuſtenance. Time will ſhew whether the *Jakutski* people, that are ſettled along the rivulets which fall into the *Ochotska*,

Ochotska, be more successful. The want of cattle, in some measure, is made up by the deer, which the natives have in greater plenty than in *Kamtschatka*; but these are more used for carriage than food. They also travel with dogs, but not so commonly as in *Kamtschatka*.

There were four transport-vessels built here: namely; the Fortune, in which in the year 1737 I went to the Great River, and which was lost soon after; the boat Hauriel, which was used also in long sea voyages for some time; the Galliot *Ochotska*; and a small vessel, which was not then launched. The passage by sea used formerly to be only once a year; namely, in the autumn, when the tax-gathers went from *Ochotsky* to *Kamtschatka*, and brought back the tax the next year: but now they go oftener.

The passage from the *Ochotska* to the Great River is directly south-east. Between the fort *Ochotskoy* and the river *Amur*, whose heads are in the *Russian* dominions, the following rivers run into the sea: the first is *Urack*, 24 versts from the *Ochotska*. It is to be observed, that in the time of the *Kamtschatka* expeditions the provisions were used to be sent down this river upon flat-bottomed boats to the *Ochotska*; for which reason they built a dock 50 versts from its mouth, where the sailors and the *Ochotskoy* Cossacks used to build vessels for the above expeditions, and send the said provisions from the *Iudomskoy* Krest, or cross, to that place over land by horses or deer in sledges. But this way of carriage by water was attended with great trouble, loss of time and people; for the river is very rapid, rocky, and full of cataracts, and not always deep enough, except in the spring, or after great rains: and as these additional waters run soon off, they are obliged to watch every opportunity of sending down the loaded vessels; which if they omit, they must often wait a long time.

There never was a fleet so happy in this navigation as not to lose some vessels either by rocks or cataracts, many of which are so

fefs any thing more than what they had done voluntarily before. 651

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity. 692 717 R. 177 .65

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.* 361 R. 177 .71

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Tegbil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

and ſometimes they played 'till both parties had pawned their cloaths for brandy. Such way of living, one may eaſily believe, was attended with great confuſion; but what the poor ſlaves ſuffered is almoſt incredible, being obliged ſometimes to change their maſters twenty times a day.

The invention of making ſpirits happened accidentally. The Coſſacks, after the manner of the natives, made a great proviſion of all kinds of berries for the winter. It happened ſometimes that they began to ferment in the ſpring, and could be uſed no other way than in drink. This drink was obſerved to cauſe drunkenneſs when taken in great quantities; upon which they began to diſtil it, and, to their great ſurpriſe and pleaſure, found that it produced a good ſpirit. They have ſince diſcovered that they could make brandy from an infuſion of the ſweet graſs, and now they have ſpirits in plenty. Their method of preparing this herb for diſtillery we have already explained.

Thoſe that are curious to know whence the Coſſacks ſettled here obtained their riches, muſt be informed that they owe them to the following circumſtances: firſt, when they conquered the natives they made all the plunder they could: ſecondly, every party of Coſſacks, that was employed in gathering the taxes, obliged each tributary native, beſides the crown tax, to give them four fox-ſkins and one ſable, which they divided among themſelves: thirdly, by their commerce with the natives, whom they obliged to pay a very high price for every trifle they furniſhed them with. Although, at preſent, the Coſſacks are forbidden to take any thing more than the crown tax, yet they are ſtill allowed to ſet what price they pleaſe upon their goods; and indeed they ſell them, or change them for furrs, at very great profits, and ſometimes for proviſions, nets, and boats. Without this they would not be able to live upon their ſmall pay, which is no more than what they uſed to receive at *Jakutſki*, and, both in money and proviſions, does not amount to above 14 rubles

7:Lesseps T-3 (1787-88)1790 Kamchadal

793 ſalary of eighty roubles, and twenty *pouds* * of rye flour. His pariſhioners of conſequence, pay no tythes; but he receives alms and other caſual emoluments attached to his church. For a marriage, a chriſtening, or a burial, theſe prieſts demand whatever they pleaſe. There is no regulation in this reſpect, and every thing is governed ſolely by their caprice, which occaſions conſiderable impoſitions and abuſes. In general however, they endeavour to proportion their demands to the abilities of their pariſhioners, a diſcretion that is entitled to applauſe.

651 R 177 .65 The Kamtſchadales are free. They are ſubject only to an annual tribute to Ruſſia, which conſiſts, as I have already ſaid, in various kinds of furs; ſo that the produce of their chace, turns almoſt entirely to the

* A Ruſſian weight equal to about thirty-three pounds.

advantage

7:Lesseps T-3 (1787-88)1790 Kamchadal

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advantage of the empreſs. Every chief of a family is obliged to furniſh for himſelf and for each of his children, even ſuch as are in their minority, a certain quantity of ſkins equivalent to his ſhare of taxation: this may amount to ſeven roubles more or leſs, and the ſkins, I am told, are generally valued at the loweſt poſſible price. This mode of paying tribute muſt produce a conſiderable revenue to the crown, if we merely judge from the number of ſables the province annually ſupplies, which is ſomething more than four thouſand. The toyon of each oſtrog collects the taxes, and remits them to the treaſurer of the crown; a receipt is previouſly given to every individual of the amount of his tribute, and each Kamtſchadale takes care to mark with his ſeal, or ſome other ſign, all the furs that he delivers.

The current coins are the golden imperial

of

7:Lesseps T-3 (1787-88)1790 Kamchadal

692 merce, and their deciſions are either con-
671 firmed or annulled by the court to which
428 they are carried by appeal. The Ruſſian
R code of laws is the only one that is attend-
177 ed to; it is too well known to require that
.67 I ſhould enter into particulars; and I could only repeat what has been already related by various hiſtorians and travellers better informed upon the ſubject than myſelf.

I ought however to add, that the property of the Kamtſchadales devolves, of courſe, upon their deceaſe, to the next heir, or to whomſoever it is bequeathed. The will of the teſtator is equally reſpected, and as literally adhered to, as it could be with thoſe nations of Europe who are moſt ſcrupulous on the ſubject of ſucceſſions.

586 Divorces are neither practiſed or allowed
R among the Kamtſchadales. The Ruſſians
177 ſeem to court their alliance, though it pro-
.58 cures

7:Lesseps T-3 (1787-88)1790 Kamchadal

586 R 177 .58

cures them no particular priviledge. Their motive is obvious. By frequent marriages, it is poſſible that before the end of the preſent generation, the race of the indigenes may be totally extinct.

681 R 177 .68

The penalty of death, aboliſhed in all the dominions of the empreſs, is never inflicted in Kamtſchatka. In their earlieſt migrations, the Ruſſians, when accuſed of haraſſing the natives, were condemned to the knowt; the Kamtſchadales alſo, for various offences, were liable to this cruel puniſhment; but it is no longer practiced. When the natives are guilty either of petty or capital offences, the puniſhment is whipping. It may be queſtioned whether they have gained by the change. The preſent mode of puniſhing them being more ſimple and expeditious, it is reſorted to with leſs ſcruple, and is liable to frequent abuſe.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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among theſe people the manners and cuſtoms of Ruſſia. This important office was confided, in 1784, to baron de Steinheil, who fixed his reſidence at Nijenei. Affairs calling him elſewhere, he was ſucceeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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The government is not purely military; there are ſome tribunals eſtabliſhed for hearing and deciding cauſes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtſchatka; they are ſubject to the juriſdiction of the court of Okotſk, in the ſame manner as in Ruſſia the magiſtrates of the ſubordinate towns hold from thoſe of the capital, in whom the final deciſion reſts. There is beſide at Bolcheretſk a kind of conſular juriſdiction, or vocal tribunal, called in Ruſſia *Sloveſnoi-ſoud*. The judges are merchants; they take cognizance of all diſputes relating to commerce,

103 *The Coaſt* extends from the *Bolſcheretſkoi* or Great River to the *Tegbil.*

Awatſcha extends from the *Bolſcheretſkoi* to fort *Awatſcha.*

Bobrovoi or *Beaver Sea* is the diſtrict round *Kamtſchatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtſchatka* to the *Tegbil.*

Ukoi is the eaſtern coaſt from the river *Ukoi.*

Tegbil is the weſtern coaſt from the river *Tegbil.*

133 361 563 *Kamtſchatka* is plentifully furniſhed with rivers; however they are ſo little that none of them are navigable by the ſmalleſt veſſels, except the river *Kamtſchatka*, which will carry ſmall veſſels 200 verſts upwards from its mouth. Into this river it is reported that ſome *Ruſſians* were brought by ſea, long before its ſubjection to *Ruſſia.* It is at preſent called *Theodotoſhine*, from the chief of thoſe people thrown a-ſhore, whoſe name was *Theodot.* Next to this, the moſt conſiderable rivers are, the *Bolſchaia-reka*, or Great River, *Awatſcha* and *Tegbil*; upon which the *Ruſſians* have ſet-
133 tlements. *Kamtſchatka* is likewiſe very well furniſhed with lakes, particularly about the river of that name, where they are ſo numerous that there is no paſſage over land in the ſummer-time. Some of them are very large: the moſt conſiderable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtſchatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilſkoy*, out of which runs the river *Oſernoi.*

133 712 R 177 .71 The river *Kamtſchatka* riſes in a marſhy ground, and firſt runs north-eaſt; then inclines more to the eaſt, and turning at once towards the ſouth-weſt, falls into the ocean in 56° 30′ north latitude. From its ſource to its mouth, in a ſtrait line, is 496 verſts; but the length of its courſe, according to the exacteſt computation, is about 525 verſts; during which it receives into it many brooks and rivers. About two verſts from its mouth, upon the right ſide, are three deep bays. There are ſeveral forts built along the banks of this river by the *Ruſſian* Coſſacks, to

awe

awe and keep in subjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtschatka* on the left side, and its head meets that of the *Tegbil*.

The *Tegbil* runs almost in the same latitude with the *Kamtschatka*; and the strait road from the one to the other is by the river *Elouki*. Some little forts and settlements of the natives are scattered here and there upon its banks.

The *Bolschaia-reka*, or Great River, called by the natives *Keekska*, runs out of a lake 185 versts to the east from its mouth, and falls into the *Penschinska* sea in the latitude of 52° 45′. Its mouth is reckoned to be 555 versts to the south distant from that of the *Tegbil*. It is called Great upon this account, that of all the rivers that fall into the *Penschinska* sea this is the only one which they can navigate from its mouth nearly to its spring, and this not without some difficulty, on account of its rapidity and the great number of islands. At the time of high water it is so deep at the mouth that large vessels may enter; for the water has been observed to rise at full and new moon very little less than nine *Paris* feet or four *Russian* yards. It receives a multitude of rivulets; the most considerable of which is the *Bistroy* or Rapid River, so called from the swiftness of its stream, caused by the many shoals and cataracts. You may go from the mouth of the Great River to that of the *Bistroy*, and up within 40 versts of its head; and from thence over a carrying place to the river *Kamtschatka*, that springs out of the same marsh, and runs quite to the Eastern Ocean. And though this passage must be laborious and tedious, upon account of the rapidity of the river, and the many shoals and cataracts, where every thing must be carried by land, and which would render it impossible to advance more than 10 versts in a day (as I found in my way to *Kamtschatka* in the year 1739, when the boats were carried over the marsh, about two versts from the head of the Rapid, to *Kamtschatka*); yet, considering

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 civilized nations. Their number is reckoned to be 100 men or more, but not above 30 of them pay any tax, the reſt, at the time of its gathering, hiding themſelves in the mountains. They go to this iſland in the ſummer in their little boats; but in the winter they have no communication with it.

133 There is little worth notice after you paſs the above-mentioned
721 iſland, 'till you come to the *Uyulen* or *Olutora* river. Upon this
R river the *Ruſſians* twice built the *Olutorſkoy* fort. The firſt was
177 built by a native of *Jakutſki*, called *Athanaſey Petrove*, upon
.71 the ſouthern ſhore, very little above the mouth of the *Kalkina* rivulet which falls into the *Olutora* from the ſouth; and the ſecond a great deal below that place under the direction of Major *Paulutſkoy*, who was ſent there on account of the rebellious *Tchukotſkoi*; but both of them were forſaken and burnt down by the *Olutores*. The laſt fort is about two days' voyage from the mouth of the *Olutora*.

133 The *Atwaleck* cape, which extends 80 verſts into the ſea, begins near the river *Elir*, and points towards the *Govyannoy* cape. The ſea between thoſe capes is called *Olutorſkoy*. The *Pockatska* riſes in the ſame plain with the river *Glotova*, which runs from the north-eaſt into the *Olutora*. From the *Kalkina*, where was built the firſt *Olutorſkoy* fort, to the river *Pockatska*, is five days' journey with rein-deer, reckoning for each day between 30 and 40 verſts. Between the *Katurka* and the land oppoſite to *Anadir*, there projects into the ſea a rocky cape, called *Kateerſkoy* in 64° 15′ north latitude. The diſtance from the *Petropaulauskaya* haven to the mouth of the *Anadir*, as obſerved by the ſea-officers, is 19° 20′; and the ſea coaſt from the *Kurilskaya Lopatka* to the *Tchukotskoi* cape, north eaſt, which lies in 67°, is for the moſt part mountainous, eſpecially in thoſe places where the capes project into the ſea.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

fess any thing more than what they had done voluntarily before.

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity.

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.*

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Tegbil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

361 different buildings; the entrance into the fort is by a ſmall
563 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about
45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

The

chatka expedition upon the haven of *Petropaulauſkay*. Its great beauty is its church, which is finely ſituated, and very well built. This fort has almoſt the ſame advantages and diſadvantages as the *Bolſcheretſkoi* fort, with this difference, that here the hunting of the beaver is more convenient; but the water is bad and unwholſome, ſo that they ſend frequently from this bay to the river *Awatſcha* for their freſh water.

We can give no account of the fifth fort, which was built upon the river *Tegbil* after my departure from *Kamtſchatka*. It was garriſoned with 37 male inhabitants. Mr. *Steller* tells us, that this fort was built with a view to reſtrain the ſettled *Koreki*, and for a ſtage to thoſe who travel round the *Penſchinſka* ſea to *Ochotſka*; and, in caſe of neceſſity, to protect the rein-deer or wandering *Koreki* againſt the *Tchukotſkoi*. The inhabitants of this fort can deprive thoſe of the lower *Kamtſchatka* fort of ſeveral advantages, becauſe they lie more convenient for hunting the ſable upon the river *Tegbil*, and the *Koreki* rather chuſe to bring their goods to them than to the two other forts, as being nearer.

CHAP. VI.

Of the Manner in which the Coſſacks live there; of their DISTILLERY, PROVISIONS, *&c.*

THE Coſſacks of *Kamtſchatka* live almoſt in the ſame manner as the natives, feeding like them upon roots and fiſhes; and their occupations are nearly the ſame. In the ſummer they catch fiſh for their winter proviſion, and gather nettles, of which they make nets. Their difference only ſeems

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 attempt by land, and the paſſage by ſea was not leſs dangerous; beſides there was no veſſel either in the port of Saint Peter and Saint Paul, or of Bolcheretſk *.

M. Koſloff had his affairs to ſettle, which, with the preparations for our departure, detained us ſix days longer, and afforded me time to ſatisfy myſelf that the frigates were not likely to return. I embraced this opportunity of commencing my obſervations, and making minutes of every thing about me. I attended particularly to the bay of Avatcha, and the port of Saint Peter and Saint Paul, in order to give a juſt idea of them.

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This bay has been minutely deſcribed by captain Cook, and we found his account to be accurate. It has ſince undergone ſome

* The navigation is ſufficiently ſafe in ſummer, and is the only mode of travelling that is adopted.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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alterations; which, it is ſaid, are to be followed by many others; particularly as to the port of Saint Peter and Saint Paul. It is poſſible indeed, that the very next ſhip which ſhall arrive, expecting to find only five or ſix houſes, may be ſurpriſed with the ſight of an entire town, built of wood, but tolerably fortified.

Such at leaſt is the projected plan, which, as I learned indirectly, is to be aſcribed to M. Kaſloff, whoſe views are equally great, and conducive to the ſervice of his miſtreſs. The execution of this plan will contribute not a little to increaſe the celebrity of the port, already made famous by the foreign veſſels which have touched there, as well as by its favourable ſituation for commerce *.

To

* According to the accounts of the earlieſt navigators, it is the moſt commodious port in this part of Aſia, and ought to be the general depôt for the commerce of the country. This would be ſo much the more advantageous, as the veſſels which frequent the other ports, commonly conſider themſelves

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361 To understand the nature, and estimate
712 the utility of this project, nothing more is
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.71 selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

177 An English ship, belonging to M. Lanz, a merchant of
439 Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had sailed, in

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361 712 R 177 .71

ceſſary than to have an idea of the extent and form of the bay of Avatſcha, and the port in queſtion. We have already many accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

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in order to begin its cargo, which it expected to complete at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

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ſchatka is built. Upon an eminence to the eaſt, at the moſt interior point of the bay, is the houſe of the governor *, with whom M. Kaſloff reſided during his ſtay. Near this houſe, almoſt in the ſame line, is that of a corporal of the garriſon, and a little higher inclining to the north, that of the ſerjeant, who, next to the governor, are the only perſons at all diſtinguiſhed in this ſettlement, if indeed it deſerves the name of ſettlement. Oppoſite to the entrance of the port, on the declivity of the eminence, from which a lake of conſiderable extent is ſeen, are the ruins of the hoſpital mentioned in captain Cooke's voyage †. Below theſe,

Ruſſians to protect them from the incurſions of the natives, who, doubtleſs, did not paſſively ſuffer their country to be invaded. The appellation of oſtrog is now given to almoſt all the villages in this country.

* His name was Khabaroff, and he had the rank of a *prēporchik*, or enſign.

† At a little diſtance from this ſpot was buried, at the foot of a tree, the body of captain Clerke. The inſcription which

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these, and nearer the shore, is a building which serves as a magazine to the garrison, and which is constantly guarded by a centinel. Such was the state in which we found the port of St. Peter and St. Paul.

By the proposed augmentation, it will evidently become an interesting place. The entrance was to be closed, or at least flanked by fortifications, which were to serve at the same time as a defence, on this side, to the projected town, which was chiefly to

which the English placed upon his tomb, was on wood, and liable to be effaced. Count de la Perouse, desirous that the name of this navigator should be immortalised, without having any thing to fear from the injuries of the weather, substituted instead of it an inscription on copper.

It is needless to mention, that he enquired at the same time where the famous French astronomer, from the island of Croyere, had been buried. He entreated M. Kasloff to order a tomb to be erected, and an epitaph, which he left engraved on copper, to be placed on it, containing an elogy, and the circumstances of the death of our countryman. I saw his intentions carried into execution after the departure of the French frigates.

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7:Lesseps T-3 (1787-88)1790 Kamcnadal

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be built upon the ſite of the old hoſpital; that is, between the port and the lake. A battery alſo was to be erected upon the neck of land which ſeparates the bay from the lake, in order to protect the other part of the town. In ſhort, by this plan, the entrance of the bay would be defended by a ſufficiently ſtrong battery upon the leaſt elevated point of the left coaſt; and veſſels entering the bay could not eſcape the cannon, becauſe of the breakers on the right. There is at preſent upon the point of a rock, a battery of ſix or eight cannon, lately erected to ſalute our frigates.

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I need not add, that the augmentation of the garriſon forms a part of the plan, which conſiſts only at preſent of forty ſoldiers, or Coſſacs. Their mode of living and their dreſs are ſimilar to the Kamtſchadales, except that in time of ſervice they have a ſabre, firelock, and cartouch box; in other

reſpects

7:Lesseps T-3 (1787-88)1790 Kamchadal

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From this minute deſcription of the fort of Bolcheretſk, it muſt appear ſtrange that it retains ſo inapplicable a name; for I can affirm, that no traces are to be found of fortifications, nor does it appear that there has ever been an intention of erecting any. The ſtate and ſituation, both of the town and its port, induce me to believe, that government have felt the innumerable dangers and obſtacles they would have to ſurmount, if they were to attempt to render it more flouriſhing, and make it the general depôt of commerce to the peninſula. Their views, as I have already obſerved, ſeem rather turned to the port of Saint Peter and Saint Paul, which for its proximity, ſafety, and eaſy acceſs, merits the preference.

563 There is a degree of civilization at Bolcheretſk, which I did not perceive at Petropavlofska. This ſenſible approach to European manners, occaſions a ſtriking differ-

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22: Guillemard T-2 (1882) 1886 Kamchadal

137 locomotion as their charges. At this rate of advance our journey's
133 end seemed distant indeed. We pressed on, however, as well as we could, and crossed a small plain from which the base of the Avatchinska group of volcanoes was visible to our right. Their summits were hidden in thick mist, and the weather, which had hitherto been fine, now looked most threatening. Arriving at a small stream, Vodki and his two companions halted, and declaring that there was no water farther on, proceeded to unload the horses. This we soon put a stop to, and telling them that, water or no water, we had no intention whatever of camping for another hour or more, we resumed our journey. The scenery now changed, and we entered a gloomy birch-forest with much thick undergrowth. This was in places six or eight feet, or more, in height, and was composed of coarse grass and giant umbelliferæ, with an occasional blue monkshood, varied in the more open parts with large patches of yellowing bracken. Before long we reached another stream, and were thus enabled to prove the truth of our surmises; but it was not till some time later that we finally halted for the night, the horseboys being by this time scarcely in a condition to proceed farther. We were glad to pitch camp and get a rest, as it had already begun to rain. Before turning in we succeeded in finding Vodki's brandy bottle, but it was perfectly empty. The man had disposed of a pint or more of raw spirit since leaving the settlement!

712 In this kind of travel movement is not very rapid for the first
R day or two until every one has shaken down to his work, and on
177 the following morning we were nearly three hours in getting breakfast and striking camp. The horseboys were depressed and inclined
.71 to be penitent. If, like an old Kafir servant of mine, they estimated the amount of enjoyment of the previous night by the strength of the morning's headache, they ought, to all appearances, to have been well pleased. We had decided to leave Avatcha on our left, and to make for Stari-ostrog,[1] a small village a little higher up the Avatcha River, and forty versts from Petropavlovsk.

[1] The *ostrogs*, or small forts, were erected by the Russians in bygone days as a protection against the natives at the time of the first settlement of the country. The name now alone remains, all traces of fortification having long since disappeared.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

712 / R / 177 / .71 / 224 / 438 / 443 / 452 / 563

We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

village to demand their tribute, they were received with all marks of friendſhip, and not only the tribute was paid, but likewiſe great preſents were made them. Thus the natives having lulled them into a ſtate of ſecurity, they either cut their throats in the night-time, or ſet fire to their huts, and burnt them with all the Coſſacks which were within. By ſuch ſtratagems 70 people were deſtroyed in two places, which, conſidering the ſmall number of Coſſacks that were there, was a very conſiderable loſs: nay, it has ſometimes happened that when they had no opportunity of deſtroying the Coſſacks at firſt, they have for two years quietly paid the tribute, waiting 'till they could find an opportunity of doing it. 726 R. 177 .72

By this cunning the *Kamtſchadales* deſtroyed at firſt many Coſſacks, but now the latter are more upon their guard, and are particularly afraid of extraordinary careſſes, always expecting ſome bad intention when the women in the night-time retire out of their huts. When the *Kamtſchadales* pretend to have dreamed of dead people, or go to viſit diſtant villages, there is reaſon to dread a general inſurrection.

When this happens, they kill all the Coſſacks which fall in their way, and even the *Kamtſchadales* who will not join in the rebellion. As ſoon as they hear that troops are coming againſt them, inſtead of going to oppoſe their enemies, they retire to ſome high place, which they fortify as ſtrongly as they can, and building huts there, wait 'till they are attacked, and then they bravely defend themſelves with their bows and arrows, and every other method they can think of; but if they obſerve, that the enemy is likely to make themſelves maſters of the fortreſs, they firſt cut the throats of their wives and children, and afterwards either throw themſelves down the precipice, or with their arms ruſh in upon their enemies that they 726 762 R. 177 .72

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and
R. the other in the year 1713 upon the river *Awatſcha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

724 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

22: Guillemard T-2 (1882) 1886 Kamchadal

136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kamschatka River that is marked on the English chart of the country.
. 72 In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

361 ants received me next, a neat place abounding in
563 cattle, if thirty or forty of them may constitute an abundance; there are however no animals of the chase. A handsome church has of late been erected under the auspices of Captain Golenistcheff, the second in command of the peninsula, whom I found expecting my arrival. I continued for Verchney Kamtchatsk, also a peasants' village, but was obliged to return owing to the inefficiency of the
361 dogs, although distant only eight miles; I at length
563 reached it much fatigued, having come through
R a pretty place called Schegatchik, where some Cos-
177 sacks are stationed to take care of a few heads of
.23 horned cattle, and four or five horses, which belong to the government. The situation is beautiful, on a branch of the Kamtchatka, which makes a semicircular indentation into the land, just opposite to Verchney Kamtchatsk, forming an island opposite to the junction of the Gatchick and Milkova.

000 I procured fresh dogs at Verchney, a place on the decline, and proceeded towards Sherom twenty miles, situated in one of the most romantic and enchanting valleys in the peninsula. I there met with the Ispravnick and eighteen nartes engaged for the collection of the yasacks, public and private, as well as for trade. I felt gratified to meet them, as I received good news of my affairs at the seat of government; and learnt also that there was a road before me to cross the desert, lying towards Malka. The Ispravnick had been detained four-

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 - with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

29:Cochrane T-2(1821-22)1824 Kamchadal

231 ple, were they once imported upon a large scale.
R The dogs, like the aborigines, are on the decline,
177 and probably twenty or thirty years more will
.23 leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 The expenses of the colony have been very great
R to Russia, and must continue so, as long as the
177 present plan is persisted in. The yasack amounts
.65 to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 The depopulated state of this peninsula is also to
758 be attributed to other causes. Their continual wars
R and insurrections greatly thinned them, and these
177 were followed by the introduction of the small-pox,
.75 which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2(1821-22)1824 Kamchadal

000 extinct, and with them the very being of the Yakuti, who are even now going down in an equal ratio.

231 R 177 .23 Much benefit has been derived to the colony from the exertions of the present Chief, Captain Rikord. The rule of never allowing a cow to be killed until she is past calving, is in itself excellent, but the stock on hand is so small that a century would elapse before what can be termed herds of cattle could be seen wandering and feasting upon the almost unbounded pastures of the peninsula. What the different chiefs have been doing for the last fifty years, Heaven alone knows! When Captains King and Clarke were here, they seem to have taken it for granted, or to have been informed, that cattle of all descriptions were in a flourishing state. From the proximity of Okotsk to Tygil, a couple of transports might, in one summer, transport at least one thousand head of cattle, which, repeated for ten years, would place the peninsula in an absolutely enviable situation. This act of humanity would be attended with no expense to the government; the Kamtchatdales would willingly pay the value in sables, and the result would be, that no part of the vast Russian empire would be richer or better provided with food of various descriptions than the distant province of Kamtchatka.

134 241 R 177 .24 Upon the banks of the Kamtchatka, where the land lies distant from the salt water, and sheltered by the mountains from the east winds; as well as

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 extinct, and with them the very being of the Yakuti, who are even now going down in an equal ratio.

231 R 177 .23 Much benefit has been derived to the colony from the exertions of the present Chief, Captain Rikord. The rule of never allowing a cow to be killed until she is past calving, is in itself excellent, but the stock on hand is so small that a century would elapse before what can be termed herds of cattle could be seen wandering and feasting upon the almost unbounded pastures of the peninsula. What the different chiefs have been doing for the last fifty years, Heaven alone knows! When Captains King and Clarke were here, they seem to have taken it for granted, or to have been informed, that cattle of all descriptions were in a flourishing state. From the proximity of Okotsk to Tygil, a couple of transports might, in one summer, transport at least one thousand head of cattle, which, repeated for ten years, would place the peninsula in an absolutely enviable situation. This act of humanity would be attended with no expense to the government; the Kamtchatdales would willingly pay the value in sables, and the result would be, that no part of the vast Russian empire would be richer or better provided with food of various descriptions than the distant province of Kamtchatka.

134 241 R 177 .24 Upon the banks of the Kamtchatka, where the land lies distant from the salt water, and sheltered by the mountains from the east winds; as well as

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on those banks which have been enriched by the lava emitted by the volcanoes, barley, oats, and rye have been produced, but in no instance with so much success as to pay the labour. The productions, it is true, have been a little more varied and a little riper, but rarely consumable. In spite of this fact, the gazettes of St. Petersburgh formally and officially announce this year that a quartern of rye produced nine quarterns, and that the size or weight of a common potatoe was three quarters of a pound. Three quarters of an ounce would be a sufficient tax upon credulity: I have no hesitation in saying that both these reports are fabulous in every sense of the word, for I have never seen a potatoe in the whole province either ripe, or larger than a hen's egg.

If large herds of cattle were distributed on the banks of the Kamtchatka, and other favoured places, with the benefit of manure, agricultural implements, and knowledge, no doubt the soil might be made to answer the purpose. I certainly cannot conceive the climate of Kamtchatka to be such, as of itself to preclude the pursuit of agriculture in some of its minor branches, as I consider the soil to be much superior to that of Connecticut, or Massachusetts, or either of our Canadas.

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In the vicinity of Avatcha are to be seen, what are by some termed artificial enclosures, within which cattle were formerly maintained, but I conclude them to be natural enclosures formed by the

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273 generation that the stock itself can be preserved,
435 which will not long be possible, if spirit continue
563 to be transported and retailed out as it now is.—
R While making these reflections in England, I am
177 aware that the Russian Government have desisted
.27 from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

651 The abuses arising from the collection of the
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R siderable, but from the arbitrary manner in which
177 it is collected, it is rendered odious and oppressive.
.65 The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

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reverend pedlers, for every body here is a merchant. I made them happy by a pound of tea, a few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

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At midnight I continued on for Kovranskoy ostrog, twenty-two miles. There is here a law obliging the Toions to have a path made within twenty-four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

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487 quently was obliged to go before upon his snow
R shoes; and such was his diligence from fear of re-
177 prehension, that he not only arrived before me, but
.48 arrived in five hours, a very short time to accomplish such a journey upon snow shoes. I found it the most miserable place I had seen for a long period, reminding me of Zashiversk in northern Siberia. The brows of the hills are covered with brush wood, with little other appearance of nature.
133 From hence to Uskolofskoy ostrog are thirty-five
161 miles, which I was obliged to do by walking and al-
361 ternately driving a narte, and cannot say which of the two is the most fatiguing. The diseases prevalent in the place prevented almost any assistance being rendered us. There are no cattle, yet fine meadow lands. Fish and game are abundant. At this place I met with another old shipmate in the person of the brandy contractor, who accompanied me to the next station, Napanas, a village with six dwellings and forty people. The road leading to it is considered dangerous, owing to a large toondra or swampy desert which must be crossed; the dis-
000 tance is forty miles. We passed the desert in a slight fall of snow, which had not been sufficient to obliterate the marks of the track, else we must have been compelled to halt whenever the snow overtook us. I did not arrive until two o'clock in the morning, having been previously hurled down a snowy declivity of one hundred feet in depth: at the bottom of which, I, guide, dogs and narte all lay huddled together; however vexed I felt inclined to

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157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

177 Their dress is the same as formerly, that for the
291 winter season being made of the skins of beasts;
435 but in summer they wear nankeens, and at present there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

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000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

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563 destitute of society; the Creoles of their being
609 kept in a state of poverty; while the Kamtchat-
631 dales bitterly lament the association with either the
R one or the other. It has been observed that St.
177 Peter and St. Paul's can never be a good town,
.63 owing to its want of wood. It may be asked, why
then was the seat of government removed from a
more eligible place, Nishney Kamtchatsk, or why
was it not removed to the centre of agriculture and
population, so far as either can be said to exist? It
has been already changed three times, and is, I be-
631 lieve, destined to another removal. Kamtchatka
R neither can nor will thrive so long as its chiefs are
177 sent for five years only: such a short period
.63 scarcely allows them the time of doing good, how-
ever well disposed they may be. The general mode
of occupying the allotted term may be thus de-
scribed. The first year is employed in looking
about and forming places for the improvement of
the country, the amelioration of the condition of
the aborigines, &c.: the second year is passed in
making reports, stating opinions, &c.: the third
year brings the reply of the government, direct-
ing or authorizing the mode of administration:
the fourth is employed in preparing or at most in
acting upon such orders: while the fifth and
last year is generally employed in preparing to re-
turn to Europe, and levying a parting contribu-
tion:—and thus the whole five years are, more or
less, taken up in trading and accumulating as much

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631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
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136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

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133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
.65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.
563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

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231 R 177 .23

ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65

The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

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The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

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651 661 R 177 .65

poor family has been ruined through the cruel and oppressive conduct of these tax-gatherers, not from a deficiency of the *legal* dues, but of illegal dues. The mode of taxation in each ostrog is also highly objectionable, and sometimes rendered cruel. They are not taxed as a people but as a place, and it not unfrequently happens that the village which formerly contained forty or fifty able people, and was taxed as such, does not the following year contain more than twenty or twenty-five, in consequence of illness or removals. There is, however, no remedy, the yasack of the whole must be paid by the few. It is also not a little singular that each ostrog is taxed in money, and yet money cannot be received; the duplicity of this act is too apparent to be mentioned, yet it would be seen that the government must be unacquainted with a fact of the kind, for the difference in the amount of the tribute would not equal one hundred pounds. Instead of the sum of money at which each village is rated, the inhabitants are obliged to pay furs at one fourth the value. Sables of the finest quality, and worth forty shillings a pair, are never averaged at more than ten. It would be more honest to increase the nominal tribute of money, or put a specific tax on furs, which would be felt less severely, because an appearance of candour would accompany it.

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The next galling tax is that levied for the tax-gatherer himself, and this is a greater grievance than that levied on behalf of the Emperor, and under more humiliating circumstances. Each os-

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000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single man pays a heavy tax, a married man a heavier, and a father the heaviest of all. Such conduct is bad policy on the part of government, and carries with it more the appearance of a wish to extinguish than to increase the population of Siberia.

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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trog, and each Toion or Chief of it, is also compelled to pay the same tribute to his actual Chief as to the Emperor himself; so that the yasack is *de facto* paid at least five times over.

Nor is the impolitic system of collecting the tribute more injurious than that arising from forced or gratuitous services, such as the forwarding of the post, the transport of flour and salt, and the issuing of padvodies, or forced levies of horses or dogs, to officers and favourites. This is indeed an intolerable abuse, and calls loudly for redress. There can be no doubt but that if the proprietors of dogs were rewarded at a proper time and in a proper manner, they would as much court the employment as they now abhor it. According to the present plan the natives lose their time, their dogs, their health, and their provisions. Any favourite or officer who may wish to trade is furnished with one of these free billets, which authorizes him, upon the plea of public duty, to call out men and dogs. While the manner of the officer or favourite seems to intimate, that he confers an obligation upon the Chief of the village by his acceptance of a couple of sables as a present. Nor is this all: not content with the present, the party travelling has the privilege of trading, and buying just as many more sables as the poor aboriginal may have caught, and which are invariably sold for just such a consideration as the officer may incline to give.

If a governor or officer be compelled to travel upon public service, and receive from the Crown a

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sum of money to pay travelling expenses, it seems very strange that such money is not paid to these poor people. As little can I understand why a post should travel gratis: surely the poorest and most distant part of the Russian empire, should not be oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

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With respect to the pedlers, here denominated merchants, they in truth ought to be taxed severely, as well in regard to the goods they bring as the price at which they are sold, the articles being such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future necessities. The quantity of articles hawked about by the merchants consists of tobacco, spirits, silks, tea, sugar, nankeen, and cotton handkerchiefs. Every Kamtchatdale keeps open house, and upon the arrival of a Russian his door is held open, the

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000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
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437 Chief, and conducted to the warmest and cleanest
563 part of the yourte. His upper garments are taken
374 from him, cleared of the snow and put out in the
661 open air for the night; it being understood that
R the colder the dress is put on in a cold country,
177 the warmer it ultimately becomes. The landlady, or
.66 Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

000 I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

29:Cochrane T-2 (1821-22)1824 Kamchadal

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the extreme of oppression from neglect and mal-administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

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I need say nothing of their superstitions, as they are nearly at an end. They now place as much reliance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

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Of laws they have but few of their own, their motto being something like that of the Chinese, "to return evil for evil, and good for good." At present they await the arrival of the Chief, of an Officer, or of a Commissary, with a great deal of ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

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The Kamtchatdales are now supplied with culinary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2 (1821-22)1824 Kamchadal

133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer,
but its situation in winter is exposed and dreary. A
range of mountains from the NE to the SE defend
it in some degree from the coldest winds, yet it is
on the whole but a poor place. There are at pre-
sent twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
.71 speaking of fortresses or ostrogs, the latter word
comprehending Siberian fortresses, says, "It would
be dangerous to attempt storming them, for who-
ever wanted to mount the greatest and only bul-
wark, a wooden paling, would most probably come
to the ground with the whole structure about him."
Such I am certain is the present state of Tygil,
and which, with its half dozen Cossacks, can only
be held *in terrorem* over the neighbouring Koriaks:
the Kamtchatdales are not a people numerically or
physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hos-
pital erected; when they are to be covered in I
know not, though shortly I hope, for they are
much wanted. The ravages of a certain disease
at this place are indeed dreadful, and I should
think ought to call forth the attention of the govern-

29:Cochrane T-2 (1821-22)1824 Kamchadal

758 are doctors. Having refreshed myself, I proceeded
R to examine the hospitals and baths, all of which I
177 found in a disgraceful state of filthiness and decay.
.75 There are two hospitals, one for the Kamtchatdales and a smaller one for the accommodation of the officers. There are also two baths, both ill contrived, and in want of every necessary and convenience which persons who have recourse to them require. The hospitals are without medicines, and the baths without flannel gowns, blankets, sheets, or towels; nor is there even a warm passage for the patient from the bath to the hospital; he must come from a place, where the atmosphere is equal to 25° of heat, and pass through a current of air where there may be 15° or 20° of frost. There never was a place where more could and ought to be, or where so little has been, done for the benefit of so wretched a people. The late chief doctor was five years in the command of this hospital, during which period he did nothing but keep his patients increasing in disease; indeed it may be considered a fortunate circumstance for the Kamtchatdales, that the governor was obliged to send him as surgeon of Captain Vassilieff's ship, in lieu of the proper surgeon who remained behind at sick quarters. Not even the most common vegetables have been raised; and but for a few cows, the benevolent present of Captain Rikord, the chief, I hardly know what there would be of the really useful for this establishment, which certainly owes

29:Cochrane T-2(1821-22)1824 Kamchadal

758 nothing either to the industry or humanity of the
R doctor before alluded to.

177 The state of some of those miserable creatures
.75 whom I saw in the hospital, was such as absolutely to prevent the doctor from dressing their wounds; of course I am incapable of describing them. They are allowed by the Emperor one pound of bread and half a pound of meat per day. They have also fish in abundance, and wild berries are to be found every where round the place. The patients, being all afflicted with one disease, are cramped up into one small space, never to go out but at their own desire, nor do any work, though they might raise an unlimited quantity of vegetables from the grounds covered with the warm vapour. In short, instead of being as it is, a place calculated to engender and nourish disease almost to pestilence, it might be, at a trifling expense and with proper care on the part of the head doctor, one of the most humane and efficient establishments on the face of the globe.

312 With respect to the nature and quality of the baths, they had a strong smell of sulphur, and an unpleasant taste. The hot and cold springs are united at the baths, and it is a strange circumstance, that the one should always be boiling hot in 25° of frost, while the other at 30° of heat is always below the freezing point. These were the only remarks my short stay, in the month of December, could enable me to make. I should, how-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

I should how-
758 ever, in justice observe, that the present head doc-
R tor, if it be Mr. Gramatin, who was my shipmate in
177 the transport from Okotsk, is a man of great talents,
.75 perseverance, and industry; and had, previous to my leaving the Peninsula, seven months after my arrival and visit to the hospital, cleared the place of three-fourths of the patients, and sent them to their homes quite cured. He had no remedy but surgical operations, and succeeded in first putting the patient to sleep, and then cutting out all the afflicted parts. To the truth of this statement, extraordinary as it will doubtles appear in Russia, I beg leave to add the attestation of Dr. Zaerzerfskey, who was with me at the hospital at the time to which I allude.

000 My route from Malka to St. Peter and St. Paul's was over a highly picturesque valley, and in beautiful weather. I soon reached Nachikin and Koraki, and, changing dogs, proceeded very pleasantly till midnight damped our satisfaction a little with a fall of snow. We halted to refresh the dogs, and lay down till the peep of dawn enabled us to proceed, and we reached Avatcha by noon. But no dogs were to be procured there except three which carried my little baggage; I therefore proceeded on foot, and reached the haven at about three o'clock. My entry, alone and unperceived, was widely different from my departure:—my sensations were correspondent. In melancholy mood, leaving my betrothed for the sake of wandering

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 R 177 .23

ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65

The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 758 R 177 .75

The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2 (1821-22)1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert to one or two points not hitherto dwelt on. The children of the natives receive no education, and the children of the Russians but little more. There certainly is a school existing in St. Peter and St. Paul's, governed by a priest, and regular school-master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see how the boys could be kept alive. Of the clerical gentlemen themselves, I may observe, that they maintain a great distinction between practice and precept. They are very numerous: I know not what so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

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29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 sides trade. Of late the Emperor has given the cler-
793 gy an allowance of flour as well as a regular salary,
R and it may therefore be hoped that the natives will,
177 at least, be so far benefited as to have fewer of their
. 79 visits, except on their spiritual concerns.

Whether the Russian government will pay any
000 attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing re-
133 markable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also
132 emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

[in the winter of 1821-22--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions.

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries.

CHAP.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 flood at one of their ancient burial-places,—a treasure that I joyfully accepted.[1]

We had taken up our quarters at the house of the head-man, and on my return thither I found that the pope had arrived to pay us a visit. His appearance was not prepossessing, and unkempt hair, a very fully-developed squint, and a total absence of conversation rendered him decidedly uninteresting as a companion. But he brought us two remarkably fine cabbages as a present, for which unaccustomed luxury we felt very grateful. We learnt that there were only nine priests or popes in the whole of Kamschatka. Like the doctors, they are paid by the Government, but they also receive tithes in kind from the people. They come for the most part from Siberia, and socially rank little, if at all, above the peasantry. This gentleman, for example, had married the sister of one of the horse-boys we had brought with us from Petropaulovsky to Sherowmy, who had been sable-hunting with Jacof Ivanovitch at the Kronotsky Lake during the preceding winter. We called on her to thank her for the present, and found her a homely litttle woman with a much larger fund of conversation than her husband. On leaving the house a grey-bearded old man rushed out upon me, seized and kissed my hand, embraced me, patted me on the back, and poured out a torrent of unintelligibility which led me to the extremely English conclusion that he was drunk. I had wronged him. Afanasi was at hand, and gave me a *précis* rendering of his speech. He was merely expressing his delight at meeting with a European traveller!

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The doctor had arrived to pay us another farewell visit when I again reached our house. We had many attractions for him; some of them in bottle. Poor old fellow; his sorrow at parting with us was too much for him, and when we turned round and discovered the Hennessey at the lowest ebb, it gave us almost pain to have to sign to Louis to remove it.

[1] *Vide* "Journal Anthrop. Inst.," Vol. xvi., No. 1, p. 21.

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Trushev's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. xxxvii, No. 2, St. Petersburg, 1908, in Russian, figures 28 (p. 342) and 29 (p. 342).

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926–27 set
161 the number of Itel'mens at 814.

The term Itel'men means "resident," "living man." In the documents
101 and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

6: Antropova E-4 (no date) 19-4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

The central figure of Itel'men mythology was the raven-creator, Kutkh.
[173] But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

In the middle of the 18th century, the Itel'mens were converted to
[199] Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

The quelling of rebellions by armed force and the arbitrary rule of the
[161] local officials reduced the Itel'men population. But the principal reason
[731] for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

The system of tax collection through the village elders and the develop-
175 ment of barter with Russians resulted in the accumulation of private prop-
648 erty in the hands of some individuals. As early as the 1730's, there were
556 toyons (elders) who lent sables to their kinsmen to enable them to pay their
426 tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 433 622 648 178 614 476

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 541 792

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7: Lesseps T-3 (1787-88)1790 Kamchadal

They are but

164 little ſubject to the ſcurvy; their uſe of
757 wild garlic, and various fruits and berries, is a preſervative. The Ruſſians and other ſettlers are more frequently afflicted with this diſeaſe.

Conſumptions are frequent enough; but boils, tumors, abſceſſes, and wens, are very common. They have no mode of curing them, but by inciſion or extirpation; and they uſe for theſe operations a knife, or perhaps ſimply a ſharp ſtone, which ſupplies the place of a lancet. Such inſtruments are calculated to impreſs us with no very high opinion of the ſkill of the operators; and it is obvious that the art of ſurgery, brought to ſuch perfection with us, is in a ſtate of the utmoſt barbariſm at Kamtſchatka.

178 Phyſic does not appear to have made a
756 greater progreſs; though it muſt be confeſſed

7:Lesseps T-3 (1787-88)1790 Kamchadal

178/756 feſſed that theſe people have gained ſomething by learning to diſtruſt their impoſtors and abſurd empiricks. Formerly, ſelf-created magicians, called *tchamans*, taking advantage of the credulity of the Kamtſchadales, turned doctors of phyſic, and thus ſecured to themſelves a double claim to their veneration and confidence*. Their ſtrange dreſs contributed to the impoſition, and ſuited perfectly their extravagant mummeries. What was told me upon the ſubject would exceed the utmoſt ſtretch of faith, if we had never heard of the Bohemians and other ſorcerers of this kind. It is not poſſible to form an idea of the buffooneries of theſe ſuppoſitious phyſicians, and the impertinencies they relate, to make their preſcriptions or pretended revelations go down. It is probable that their cures

* In an oſtrog at ſome diſtance from Bolcheretſk, I had afterwards an opportunity of conſidering this ſubject more fully, and my obſervations will be found in their proper place.

7:Lesseps T-3 (1787-88)1790 Kamchadal

178/756 were frequently attended with fatal conſequences, and that the number of victims equalled that of their patients. Tired at laſt of being duped at the expence of their lives, the Kamtſchadales began to be diſſatisfied with theſe impoſtors, who gradually loſt their credit, and ſunk into contempt and oblivion. Such has been the fate alſo of the chamans. The feeble light which the Ruſſian commerce diffuſed through the country, proved ſufficient to open the eyes of the inhabitants. They perceived at once the abſurdity of the magic art of their doctors. As it ceaſed to be reſpected, it was no longer lucrative, and the number of magicians diminiſhed of courſe. Diſguſted with the trade, the men abandoned it; and it has ſince been taken up by ſome old women, who, poſſeſſing leſs ſkill, have doubtleſs fewer cuſtomers *.

The

* The revolution which took place in Kamtſchatka reſpecting the chamans, is the preciſe hiſtory of all our mountebanks.

G /358 cont./
343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

G
342 /359/ Like the earth yurt, all the pile buildings men-
343 tioned above, the summer yurt, the storehouse, etc., are original,
171 peculiarly Gilyak structures which the neighbors of the Gilyak, the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to
K [175] [342] Krascheninnikof's and Steller's descriptions and an illustration given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan
000 by the Russians (1). The Eskimo of the American Northwest along

K [113]

1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

K [132]

K [178] [179]

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
same dish with the dogs, which they never wash; every thing
264 about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

5: Jochelson A-5 (1910-11) 1928 Kamchadal

669 was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered
761 his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

157 The present Kamchadal, however, have completely changed their psychology.
177 They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has
● 181 brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

651 The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According
R. to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed,
177.65 issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 357.

24: Lansdell-639 [3] M-2 (1879) 1882 Kamchadal
116, 181, 533, 535, 825

" The Kamchatdales have not the heroic character of their neighbours the Koriaks. Their plaintive songs do not celebrate battles, but love, sledge travels, fishing, and hunting. In their dances they mimic admirably the movements of animals, bounding like the deer, running like the fox, and even entering the water to swim like the seal. "

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer,
but its situation in winter is exposed and dreary. A
range of mountains from the NE to the SE defend
it in some degree from the coldest winds, yet it is
on the whole but a poor place. There are at pre-
sent twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word
comprehending Siberian fortresses, says, "It would
be dangerous to attempt storming them, for who-
ever wanted to mount the greatest and only bul-
wark, a wooden paling, would most probably come
to the ground with the whole structure about him."
Such I am certain is the present state of Tygil,
and which, with its half dozen Cossacks, can only
be held *in terrorem* over the neighbouring Koriaks:
the Kamtchatdales are not a people numerically or
physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hos-
pital erected; when they are to be covered in I
know not, though shortly I hope, for they are
much wanted. The ravages of a certain disease
at this place are indeed dreadful, and I should
think ought to call forth the attention of the govern-

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
291 winter season being made of the skins of beasts;
435 but in summer they wear nankeens, and at present there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22) 1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatka, are four hundred and ninety-eight, while in the Korisk villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Korisks. Whether the original population has not decreased in a surprise

29:Cochrane T-2 (1821-22) 1824 Kamchadal

175 until Vladimir Atlassof discovered the peninsula in his excursions from the Anadyr, from which time a constant petty warfare continued between the Russians and natives, until the general revolt and massacre in 1731. Since this period, the peninsula has not been greatly troubled with either
171 conspiracies or massacres. Little doubt can exist
177 that the Kamtchatdales are of Asiatic origin; of
181 this, their features and customs, as well as their dwarfish size, are evident tokens. I have read several dissertations upon the subject, but disagree with most of them. My own opinion is formed from ocular demonstration alone, and not from a study of the circumstances under which they labour. Their having progressed from America is indeed a ridiculous idea; and their having learnt many secrets, as causing fire by friction, &c. from the inhabitants of the opposite continent, is just as probable as the other sagacious notions, that they were the teachers. How, in either case, could they pass that formerly ferocious and warlike race, the Tchuktchi? Or if they had come from the north of Siberia, from Irkutsk or Yakutsk by Okotsk, and Idgiga, how did they pass the still more fierce and barbarous Koriaks? The idea is absurd; and the only one I can for a moment entertain is, that they are a Mongole tribe, who were driven down the Amoor, and passing along the Kurile Isles, reached Kamtchatka. A few of the same race are still the inhabitants of those isles,

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

Feudal Japan AB2
Ainu AB6
Kamchadal RY3
Southeast Siberia RX1

A
FJ
101
114
[113]

/194 cont./

1. (cont.)
Rumjanzof Bay on Jesso, as well as in Aniwa /Aniva/ Bay on Sakhalin, about the names Schischa (which he gives as "Chica" in a literal rendering of the French spelling or perhaps as the result of an oversight or printing error) and Tschoka, with which La Pérouse had labeled these islands.

any doubt from the correspondence of this name to Ssissa and Ssisam, merely to the Japanese coming from there. The "Sühsaman" or "Schischaman" of the Kamchadal are therefore not Ainu from Jesso, but rather, as Steller and Krascheninnikof quite correctly stated, Japanese; but they received this name not from the Italmen word for needle, but, on the contrary, the Kamchadal called the steel needle, because it came from the Japanese, "sühse" or "schisch," i.e., Japanese. On the other hand, they undoubtedly would have had a special term for the bone needle already known to them earlier (2).

FJ
101
114
K
101
192

K
[181]

2. That the steel needle and the bone needle, in spite of the fact that they were known to the Kamchadal at different times and were certainly of different shape, were nevertheless supposedly designated with the same term is inconceivable simply because this would presuppose an ability to generalize greater than one finds among a people standing at such a low level of culture.

S.S.
10

In conclusion the names with which the Amur peoples designate the Russians should be mentioned. It seems to be the same among all of them throughout. I have always heard the Russians called "Lotscha" by the peoples of the lower Amur region with whom I myself had dealings for a shorter or longer

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene.

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food.

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

29:Cochrane T-2 (1821-22)1824 Kamchadal

131 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
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756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

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554 motto being something like that of the Chinese,
692 " to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2(1821-22)1824 Kamchadal

651 sum of money to pay travelling expenses, it seems
661 very strange that such money is not paid to these
563 poor people. As little can I understand why a post
R should travel gratis: surely the poorest and most
177 distant part of the Russian empire, should not be
.66 oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

both in their language and cuſtoms, yet we have reaſon to believe they are the ſame people; the difference only ariſing from their neighbourhood, and intermarriages with the true *Kuriles*. 101 177 184

The *Kamtſchadales* have this particular cuſtom, that they endeavour to give every thing a name in their language which may expreſs the property of it; but if they don't underſtand the thing quite well themſelves, then they take a name from ſome foreign language, which perhaps has no relation to the thing itſelf; as, for example, they call a prieſt *Bogbog*, becauſe probably they hear him uſe the word *Bogbog*, God; bread they call *Brightatin Augſh*, that is, *Ruſſian* root; and thus of ſeveral other words to which their language is a ſtranger. 192

The names which the *Ruſſians* give theſe different nations they did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtſchadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language ſignifies a rein-deer; and that the *Ruſſian* Coſſacks frequently hearing the word *Kora*, or obſerving that their whole riches conſiſted in rein-deer, gave them the name of *Koreki*. 181

The inhabitants of *Kamtſchatka* have three languages, that of the *Kamtſchadales*, the *Koreki*, and *Kuriles*; each of which is divided into different dialects. The *Kamtſchatka* language has three principal dialects: the firſt is uſed by the northern, the ſecond by the ſouthern, which differ ſo much that one may look upon them as different languages; however they can underſtand one another without any interpreter: the third dialect is that which is ſpoken by thoſe who live upon the *Penſchinſka* ſea, between the rivers *Voroſkaya* and *Teghil*, which is compoſed of both the above-mentioned dialects and ſome words taken from the *Koreki*. 197 177

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime:* however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
183 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

iſlands

578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 177 Although their manner of living be most nasty, and their actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 794 871 R 177 62 In every *Ostrog*, or large village, by order of her Imperial Majesty, is appointed a chief who is sole judge in all causes, except those of life and death; and not only these chiefs, but even the common people, have their chapels for publick worship. Schools are also erected in almost every village to which the *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

Their wars are carried on more by ſtratagem than bravery; for they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

Theſe private differences among themſelves were very uſeful to the Coſſacks in their conqueſt of the whole nation; for when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their fate next.

In their wars with the Coſſacks, they deſtroyed more by ſtratagem than by arms; for when the Coſſacks came to any village

27: Sauer--308 T-2 (1789-93) 1802 Kamchadal
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

[For information pertaining to the Kamchadal language, see 22: Matthews, R1 Soviet Union, category 116; p. 7.]

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 The language of the *Koreki* consists of two dialects; one of which is spoken by the rein-deer *Koreki*, and the other by the fixed. We are not, indeed, certain what other dialects may be amongst them, being well acquainted only with those who are subject to the *Russians*; but it is probable that those who are 191 scattered among the islands may have some difference in their way of speaking. The *Kamtschatka* language is spoken half in the throat and half in the mouth: the pronunciation is slow and difficult, and seems to indicate a timorous, slavish, and deceitful people; as in fact they are.

The *Koreki* speak aloud, and in a screaming tone; their words are long, but their sentences short, and their words generally begin with two vowels, and end with one or two more: as for example, uemkai, a rein-deer which has not been driven.

The *Kuriles* speak slow, distinctly, and agreeably: their words are middling, the vowels and consonants being justly mixed: and of all these wild people the *Kuriles* are the best, being honest, constant, civil, and hospitable.

CHAP. II.

161 *Some Conjectures concerning the Names of the* Kamtschadales, *and the other Inhabitants of* Kamtschatka.

SOME assert, that the *Kamtschadales* were so named by the *Russians* from the river *Kamtschatka*, but it was called so before the *Russians* had discovered it, and had its name from a chieftain, called *Konchata*.

We cannot find likewise why the *Koreki* call the *Kamtschadales*, *Kontchalo*, nor can they give any reasons for it themselves.

The

[R 90]

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A. Elders of the villages of the western shore of Kamchatka.
B. Group of blind men and women of the village Kharyusovo.

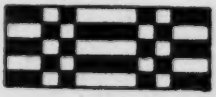
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



both in their language and customs, yet we have reason to believe they are the same people; the difference only arising from their neighbourhood, and intermarriages with the true *Kuriles*. 101 177 184

The *Kamtschadales* have this particular custom, that they endeavour to give every thing a name in their language which may express the property of it; but if they don't understand the thing quite well themselves, then they take a name from some foreign language, which perhaps has no relation to the thing itself: as, for example, they call a priest *Bogbog*, because probably they hear him use the word *Bogbog*, God; bread they call *Brightatin Augsh*, that is, *Russian* root; and thus of several other words to which their language is a stranger. 192

The names which the *Russians* give these different nations they did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtschadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language signifies a rein-deer; and that the *Russian* Cossacks frequently hearing the word *Kora*, or observing that their whole riches consisted in rein-deer, gave them the name of *Koreki*. 181

The inhabitants of *Kamtschatka* have three languages, that of the *Kamtschadales*, the *Koreki*, and *Kuriles*; each of which is divided into different dialects. The *Kamtschatka* language has three principal dialects: the first is used by the northern, the second by the southern, which differ so much that one may look upon them as different languages; however they can understand one another without any interpreter: the third dialect is that which is spoken by those who live upon the *Penschinska* sea, between the rivers *Vorovskaya* and *Teghil*, which is composed of both the above-mentioned dialects and some words taken from the *Koreki*. 197 177

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
563 eight winter months, but the summer was very busy. Scores of laborers were
228 brought on the company's steamers from the Amur River. Not all the necessary
464 structures were ready at that time, and the imported laborers slept under the cover of primitive shades. Mountains of salt lay in the open, melting from rains. A part of the laborers were busy preparing a kind of caviar from the roe of

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228 salmon. After taking out the roe they threw overboard the split fish, causing an enormous waste of food-material. The laborers in the saltery and cannery threw out from their seines all other fish than salmon, and from the latter the hump-back salmon, which was not in favor with the foreman of the plant.

● 182 From information gathered before my trip to the lake I knew that there were
000 several pits of ancient dwellings (see the map of the Kuril Lake). The natives have either died out or were exterminated by the Russian conquerors. My party

24: Lansdell-637-638 M-2 (1879) 1882 Kamchadal
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has scarcely any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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2: Schrenck--268 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu AB6
Kamchadal RY3

K 175 131 167 A 175 /127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

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2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101] Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

2: Schrenck--407 (1854-1856) 1881-1895 RX2 Gilyak
Historical Manchuria AG2
Feudal Japan AB2
Kamchadal RY3

H.M. 101 174 /192/ At the same time, however, he also calls attention to the fact that if in the place in the Rubruquis at which the Taule and Manse peoples are mentioned (1) "Taule" is taken to stand

H.M. [113]

1. Marthe, "Taule et Manse" (Zeitschrift der Gesellschaft für Erdk. 475 ff). The passage concerned in the Rubruquis runs: " "Magister W. told me that he himself had seen messengers of certain peoples who call themselves Taule and Manse, who live on islands where the sea around freezes in winter so that then the Tatars are able to cross over to them" /translated from the Latin/.

for "Caule," that is, Kaoli, meaning Korea, it follows that the Man-dse were found in or near Korea even before Kublai Khan's colonies, to which the Russian sources want to trace back the introduction of this name in the Ussuri region. Along with Marthe, however, we shall naturally leave the final solution of this question to the historians and Sinologists.

F.J. 101 121 It remains for us to discuss the names customary among the Amur peoples for the third of the East Asiatic civilized peoples with whom they come in contact, the Japanese. As is well known, Steller (2) reports that the Kamchadal or Italmen call

K F.J. 101 439 K 192 [113]

2. Beschreibung von dem Lande Kamtschatka /Description of the Kamchatka Region/, pp. 3, 249, 320.

the Japanese "Sühsaman" or "Sühsemen," and they do this, as is expressly noted by him, because the Japanese brought them the first iron needles, whereas up to this time they had made them for themselves out of sable bones; in the Italmen, and in all dialects, the needle is called sühse. Krascheninnikof (3)

K [113]

3. "Opisanie zemli Kamchatki /Description

2: Schrenck--408 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Feudal Japan A02
Kamchadal RY3
Goldi RX3
Southeast Siberia RX1

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3. (cont.)
of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[2]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

[2] [Footnote "(5)" appears on p. 409--Analyst]

Feudal Japan AB2
Ainu AB6
Kamchadal RY3
Southeast Siberia RX1

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1. (cont.)
Rumjanzof Bay on Jesso, as well as in Aniwa /Aniva/ Bay on Sakhalin, about the names Schischa (which he gives as "Chica" in a literal rendering of the French spelling or perhaps as the result of an oversight or printing error) and Tschoka, with which La Pérouse had labeled these islands.

any doubt from the correspondence of this name to Ssissa and Ssisam, merely to the Japanese coming from there. The "Sühsaman" or "Schischaman" of the Kamchadal are therefore not Ainu from Jesso, but rather, as Steller and Krascheninnikof quite correctly stated, Japanese; but they received this name not from the Italmen word for needle, but, on the contrary, the Kamchadal called the steel needle, because it came from the Japanese, "sühse" or "schisch," i.e., Japanese. On the other hand, they undoubtedly would have had a special term for the bone needle already known to them earlier (2).

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[181]

2. That the steel needle and the bone needle, in spite of the fact that they were known to the Kamchadal at different times and were certainly of different shape, were nevertheless supposedly designated with the same term is inconceivable simply because this would presuppose an ability to generalize greater than one finds among a people standing at such a low level of culture.

S.S.
101

In conclusion the names with which the Amur peoples designate the Russians should be mentioned. It seems to be the same among all of them throughout. I have always heard the Russians called "Lotscha" by the peoples of the lower Amur region with whom I myself had dealings for a shorter or longer

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

[113]

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

[419]

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojacht tschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

/571 cont./

000 K 177 192 174 325

Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

K 439 325 177 556 823 K 823 A 823 186 439

24: Lansdell-637-638 M-2 (1879) 1882 Kamchadal
116, 101, 177, 142, 192, 193

" The southern part of the [CMC: Kamchatka] peninsula is inhabited by the Kamchatdales, which is the name the Russians give them; but they are called Konchalo by their neighbours the Koriaks. They have large round faces, prominent cheek-bones, small sunken eyes, flattened noses, black hair, and tawny complexions. Their language, very guttural, is largely inflexional, or composed of invariable root forms modified by prefixes. The poverty of the language may be inferred from their having but one word for the sun and moon (khiht), but still more from the circumstance that it has scarcely any names for fish or birds, which are merely distinguished by the moon in which they are most plentiful. The language is spoken in the south among the Kuriles, and in the [638] extreme north about Penjinsk. Otherwise it is fast dying out, as is also the race. In certain parts the people are almost Russified. When Captain Cochrane travelled in Siberia, he surprised his friends by taking home a Kamchatdale wife, but this did not surprise me after meeting at Nikolaefsk, at dinner, a Kamchatdale lady who had married a Russian officer."

101 131 The natives are divided into three different people, namely, the *Kamtſchadales*, *Koreki*, and *Kuriles*. The *Kamtſchadales* live upon the ſouth ſide of the promontory of *Kamtſchatka*, from the mouth of the river *Ukoi* to the *Kurilſkaya Lopatka*, and upon the firſt *Kurilſkoy* iſland *Schumtſchu*: the *Koreki* inhabit the northern parts on the coaſt of the *Penſchinſka* ſea as far as the river *Nuktchan*, and round the Eaſtern Ocean almoſt to *Anadir*: the *Kuriles* inhabit the ſecond *Kurilſkoy* iſland, and the other iſlands in that ſea, reaching as far as thoſe of *Japan*.

101 184 197 171 The *Kamtſchadales* may be divided into the northern and ſouthern; the northern people, who live along the river *Kamtſchatka* on the coaſt of the Eaſtern Ocean as far as the mouth of the river *Ukoi*, and ſouthward to the mouth of the river *Nalacheva*, may be eſteemed the principal nation; their manners being more civiliſed, and their language appearing every where to be the ſame; whereas the others ſpeak differently on every iſland.

The ſouthern nation live along the coaſt of the Eaſtern Ocean, from the *Nalacheva* to the *Kurilſkaya Lopatka*, and thence along the *Penſchinſka* ſea northwards to the river *Harioufkovoy*.

The *Koreki* are commonly divided into two nations; one is called the rein-deer *Koreki*, and the other the fixed *Koreki*. The former wander with their herds from place to place; the latter live near the rivers, like the *Kamtſchadales*. Their languages are ſo different that they do not underſtand each other, particularly thoſe that border upon the *Kamtſchadales*, from whom they have borrowed much of their language.

101 177 184 Some likewiſe divide the *Kuriles* into two different nations or tribes, calling one the diſtant and the other the nearer *Kuriles*. By the diſtant they underſtand the inhabitants of the ſecond *Kurilſkoy* iſland and the others that lie near *Japan*; by the nearer *Kuriles*, the inhabitants of *Lopatka* and of the firſt iſland. But this diviſion is not proper; for though the inhabitants of the firſt iſland and the *Lopatka* differ ſomewhat from the *Kamtſchadales* both

both in their language and cuſtoms, yet we have reaſon to believe they are the ſame people; the difference only ariſing from their neighbourhood, and intermarriages with the true *Kuriles*. 101 177 184

The *Kamtſchadales* have this particular cuſtom, that they endeavour to give every thing a name in their language which may expreſs the property of it; but if they don't underſtand the thing quite well themſelves, then they take a name from ſome foreign language, which perhaps has no relation to the thing itſelf: as, for example, they call a prieſt *Bogbog*, becauſe probably they hear him uſe the word *Bogbog*, God; bread they call *Brightatin Augſh*, that is, *Ruſſian* root; and thus of ſeveral other words to which their language is a ſtranger. 192

The names which the *Ruſſians* give theſe different nations they did not take from the natives, but rather from their neighbours: for example, the name of the *Kamtſchadales* was taken from the *Koreki*, who call them *Kontchal*. The derivation of the name *Koreki* is uncertain; however *Steller* thinks that it probably came from the word *Kora*, which in their language ſignifies a rein-deer; and that the *Ruſſian* Coſſacks frequently hearing the word *Kora*, or obſerving that their whole riches conſiſted in rein-deer, gave them the name of *Koreki*. 181

The inhabitants of *Kamtſchatka* have three languages, that of the *Kamtſchadales*, the *Koreki*, and *Kuriles*; each of which is divided into different dialects. The *Kamtſchatka* language has three principal dialects: the firſt is uſed by the northern, the ſecond by the ſouthern, which differ ſo much that one may look upon them as different languages; however they can underſtand one another without any interpreter: the third dialect is that which is ſpoken by thoſe who live upon the *Penſchinſka* ſea, between the rivers *Vorovſkaya* and *Teghil*, which is compoſed of both the above-mentioned dialects and ſome words taken from the *Koreki*. 177 177

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
● 197 villages (between Amanino and Sopochnöye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saltcries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorised to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer

197 The Kamtſchadale idiom appeared to me to be uncouth, guttural, and difficult to be pronounced; the words are broken, and the ſounds diſagreeable. There are as many different dialects and accents as there are oſtrogs. For inſtance, upon leaving Saint Peter and Saint Paul, we are aſtoniſhed to hear a different jargon at Paratounka: this is the caſe with villages the neareſt to one another. Notwithſtanding theſe variations of idiom, I conſidered it as incumbent upon me to procure a vocabulary, which will be found at the end of my journal. I ſhall add to it the Koriac, the Tchouktchi, and the Lamout languages. My attention to the ſubject was unremitted, and I received very conſiderable aſſiſtance. I ſhall finiſh the article of my abode at Bolcheretſk, with ſome obſervations that will tend to prove the impoſſibility of my leaving it ſooner.

Towards the end of November the cold became

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i. e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya, s. v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenan anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

000 the Koryak of the Karaginsk and the Olyutorsk rayons and the small group of the so-called "Kerek."

Furthermore, it is essential to study again the Tungus of the Okhotsk seaboard, who--according to the data provided by Levin--have some Eskimoid traits.

These projects should include also the Tuguro-Chumikansk, the Zeysko-Bureinsk, and the Aldansk Tungus who up to this time have remained almost completely uninvestigated.

6. At this stage of our work the anthropological data with regard to northeastern Asia are insufficiently related to the data in the fields of linguistics, ethnography, and archaeology --a situation which is to be explained by a relative backwardness of scientific work in these fields in the recent times.

Ko 197 Ka 197 174 144 C 197 If--as Bogoraz thought--the Chukchee, the Koryak, and the Itelmen languages are, in fact, characterized by certain common linguistic features, (4), and if the appearance of these

4. The question is raised, of course, only with regard to the Itelmen language. The relationship of Chukchee and Koryak is quite obvious.

languages in northeastern Asia was connected with the migration from the outside, it is a tenable hypothesis that the migratory flow brought the Kamchatka racial type. The further development of this hypothesis is prevented by the absence of serious linguistic studies about the degree and character of relationship of the languages of northeastern Asia among themselves and with the languages spoken by peoples inhabiting other regions.

Ka 174 The distribution of the Eskimo and the Kamchatka types does not reveal their connection with the contemporary ethnic classification of the Paleo-Asiatic group. [18] It may be presumed that we are dealing here with a trace of a more ancient ethnic demarcation. Does this distribution not reflect the division of the people in question into reindeer raisers and coastal (bank) hunters? Unfortunately, we do not possess any data about the culture of the internal regions of southeastern Asia before the introduction of reindeer raising.

Ka 144 174 The question of chronological appearance of the Eskimo and the Kamchatka types in northeastern Asia cannot, it seems, be based only on the study of the present-day population groups. The Eskimo type, which has preserved some Americanoid traits regarded, not without some foundation, as protomorphic

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926-27 set
161 the number of Itel'mens at 814.

The term Itel'men means "resident," "living man." In the documents
101 and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

22: Guillemard T-2 (1882) 1886 Kamchadal

211 There are no roads even in the little settlement itself, and,
361 from the irregular distribution of the houses, and the equally
363 irregular ground on which they are built, the traveller has to
493 pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the celebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lesseps's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

[Petropavlovsk--Analyst]

7th. Sea calves' puppying time. 805

8th. Time when the tame deer bring forth their young.

9th. When the wild deer bring forth.

10th. Beginning of the fishery.

Their division of time is pretty singular; they commonly divide our year into two, so that winter is one year, and summer another: the summer year begins in *May*, and the winter in *November*.

They do not distinguish the days by any particular appellation, nor form them into weeks or months, nor yet know how many days are in the month or year. They mark their epochs by some remarkable thing or other, such as the arrival of the *Russians*, the great rebellion, or the first expedition to *Kamtschatka*. They 212 have no writings, nor hieroglyphick figures, to preserve the memory of any thing; so that all their knowledge depends upon tradition, which soon becomes uncertain and fabulous in regard to what is long past.

They are ignorant of the causes of eclipses, but when they 821 happen, they carry fire out of their huts, and pray the luminary eclipsed to shine as formerly. They know only three constellations; the Great Bear, the Pleiades, and the three stars in Orion; and give names only to the principal winds.

Their laws in general tend to give satisfaction to the injured 681 person. If any one kills another, he is to be killed by the relations of the person slain. 754 They burn the hands of people who have been frequently caught in theft, but for the first offence the thief must restore what he hath stolen, and live alone in solitude, without expecting any assistance from others. They think they can punish an undiscovered theft by burning the sinews of the stone-buck in a publick meeting with great ceremonies of conjuration, believing that as these sinews are contracted by the fire so the thief will have all his limbs contracted

 his

18: Yarmolinsky--3-4 L-4 (no date) 1947 Kamchadal
116, 114, 126, 177, 197, 212

"It should be noted that, like Yukagir (Odul), another Palaeoasiatic vernacular, Itelmen [CMC: i. e., the language of the Kamchadals] is well on its way to extinction. Of the 4,137 Kamchadals recorded in the Soviet census of 1926 only about 800 persons inhabiting eight villages in the Talgi district of the Kamchatka Region spoke Itelmen. The rest had become linguistically assimilated to the Russian population. (See Bolshaya sovetskaya entziklopediya, s. v. Itelmenski yazyk and Itelmeny.) There was [4] no Kamchadal writing prior to 1932 when an Itelmen alphabet, made up of Latin characters, was worked out at the Technical School of the Peoples, of the North, Khabarovsk. That year the first Kamchadal primer was printed [CMC: Ntanselqzaalkicen! Itelmenan anselnoan kniga... Budem uchit'sa! Itel'menskaya uchebnaya kniga. Napisana brigadoĭ itel'menov, uchashchikhsya Khabarovskovo tekhnikuma Severa... pod rukovodstvom uchitel'nitzy Ye. Orlovoĭ. Nauchno-Issledovatel'skaya Assotziatziya Instituta Narodov Severa TsIK SSSR. Leningrad: Uchpedgiz, 1932] and the following year an arithmetic [CMC: Popova, N. S. Arifmetika; uchebnik dlya 1-vo klassa nachal'noĭ shkoly; perevod na itel'menski yazyk Ye. Orlovoi. Leningrad: Uchpedgiz, 1933] These are apparently the only Kamchadal books in existence."

221/462 ſledges, and other uſes. The women at this time are buſy with their hemp of nettles, in pulling it up, watering, breaking, peeling, and laying it up in their balagans.

The men in the winter hunt for ſables and foxes, weave fiſhing nets, make ſledges, fetch wood, and bring their proviſions from ſeveral places, which they had prepared in the ſummer, and could not bring home in the harveſt. The women are principally employed in ſpinning thread for nets.

In the ſpring, when the rivers begin to thaw, the fiſh that wintered in them go towards the ſea; and the men are buſied in catching them or the ſea animals that at this time frequent the bays. The people upon the Eaſtern Ocean catch the ſea beaver.
462 All the women go into the fields, where they gather wild garlick,
221 and other young tender herbs, which they uſe not only in a ſcar-
262 city of other proviſion, which often happens at this ſeaſon of the year, but likewiſe out of luxury; for ſo fond are they of every thing that is green, that during the whole ſpring they are ſeldom without having ſome of it in their mouths; and though they always bring home a great bundle of greens, they ſeldom laſt them above a day.

462 Beſides the above-mentioned employments the men are obliged to build their huts and balagans, to heat their huts, dreſs victuals, feed their dogs, flea the animals, whoſe ſkins are uſed in cloathing, and provide all houſhold and warlike inſtruments: the women are here the only taylors and ſhoemakers, for they dreſs the ſkins, make the cloaths, ſhoes, and ſtockings: it is even a diſgrace for the men to do any thing of that ſort; ſo that they looked upon the *Ruſſians* who came here firſt in a very ridiculous light, when they ſaw them uſe either their needle or awl. The women are likewiſe employed in dying ſkins, in conjuration, and
281 curing of the ſick. Their method of preparing and dying ſkins, ſewing and joining them, is as follows: every ſkin which they uſe

27: Sauer--312-313 T-2 (1789-93) 1802 Kamchadal
116, 221, 222, 251

"The Kamtshadals and residentiary Russians employ themselves during the summer in catching fish; drying some, and salting others for a winter supply for themselves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the [313] sweet plant, and kiprey: the former is purchased by government for the distillery of brandy, at three and four roubles the pood when prepared and dried. In the spring they collect birds' eggs about the marshes, and particularly among the rocks at the mouth of the bay of Avatsha: these they preserve all the year with oil."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

29:Cochrane T-2 (1821-22)1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

177 Their dress is the same as formerly, that for the
291 winter season being made of the skins of beasts;
435 but in summer they wear nankeens, and at present there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.

† Alni.

‖ Padus foliis annuis. LINN.

‡ Oxyanthus fructu rubro et nigro.

** Sorbus.

the

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-m[illegible] [illegible]y† them in the ſun, and
435 ſell them for five or ſix rub[illegible]s the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Harioufkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry?"

which

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is abso- 177
lutely necessary. The *Russians* were no sooner settled there, than
they found that brandy was to be distilled from it; and at
present this is the only brandy that is publickly sold. The
root of this herb is without yellowish, within, white; and
of a bitter, spicy taste. The stem is fleshy, of three or four 137
joints, and about a man's height. Its flower is a reddish green,
with short white hairs, longest near the root. The leaves upon
the stem nearest the root are five or six, and sometimes even ten:
they grow upon thick, round, fleshy, green, rough stalks, marked
with little red spots. Upon the main stem, at every joint, arises
one such leaf, but without a stalk. The flowers are small
and white, like fennel, or other herbs of that sort; and
consist of five leaves, of which the innermost are largest, and the
outward smallest. It has two ovaria upon every flower, upon
short small necks; and round them are five white stamina with
green points, which rise higher than the flower. The flowers,
taken all together, resemble a plate; while the stalks which
support the umbella are longest without, and in the middle
shortest: stalks arise from every joint, upon which are
flowers.

This plant abounds every where in *Kamtschatka*, and the inha- 222
bitants gather and prepare it in this manner: they cut off the 252
stalks of the leaves which grow nearest the root, and with a shell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

222 ſcrape off the ſkin; and then bind up ten ſtalks together.
252 When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 The women, when they gather this,[1] muſt wear gloves; for the
222 juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 The manner of diſtilling ſpirits from it is as follows:—
556 They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

were black, and others white; but none of them came so near the vessel as to be exactly observed. 136

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone foxes, who watch for them; they breed in the month of *July*; 136 their eggs are green, about the bigness of a hen's egg, and 222 being boiled thicken a little, but are ill tasted; however the 223 *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these crea- 252 tures are so void of apprehension, that, though they see the 262 next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

* Columba Grœnlandica Batavorum. Stell.

† Corvus aquaticus maximus crisatus periophtalmiis cinnaberinis, postea candidis. Stell.

much

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

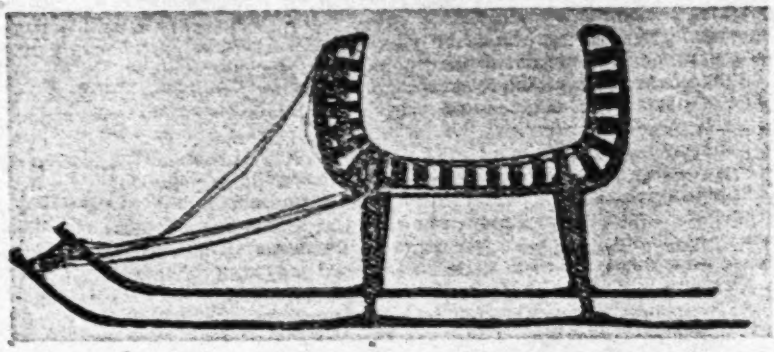
The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual
[291] family was the so-called balagan—a pyramidal, grass-covered tent set
[171] on high platforms resting on piles. The ancient dress of the Itel'mens resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 or of ſkin without hair; they are made like
291 the parque, and anſwer the ſame purpoſe,
563 that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 The principal food of theſe people con-
462 ſiſts, as I have already obſerved, in dried
222 fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamtſchadales

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 ſchadales and Ruſſians of this country.
222 When the women go out to make theſe har-
462 veſts for winter conſumption, it is high holy-
527 day with them, and the anniverſary is celebrated by a riotous and intemperate joy, that frequently gives riſe to the moſt extravagant and indecent ſcenes. They diſperſe in crouds through the country, ſinging and giving themſelves up to all the abſurdities which their imagination ſuggeſts; no conſideration of fear or modeſty reſtrains them. I cannot better deſcribe their licentious frenzy than by comparing it with the bacchanals of the Pagans. Ill betide the man whom chance conducts and delivers into their hands! however reſolute or however active he may be, it is impoſſible to evade the fate that awaits him; and it is ſeldom that he eſcapes, without receiving a ſevere flagellation.

Their proviſions are prepared nearly in the

27: Sauer--312-313 T-2 (1789-93) 1802 Kamchadal
116, 221, 222, 251

"The Kamtshadals and residentiary Russians employ themselves during the summer in catching fish; drying some, and salting others for a winter supply for themselves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the [313] sweet plant, and kiprey: the former is purchased by government for the distillery of brandy, at three and four roubles the pood when prepared and dried. In the spring they collect birds' eggs about the marshes, and particularly among the rocks at the mouth of the bay of Avatsha: these they preserve all the year with oil."

28: Sarytschew--66-67 T-1 (1789-90) 1806 Kamchadal
116, 222, 262, 609, 825

"On our journey we experienced the most friendly treatment from the Kamtschadales, who not only entertained us with the utmost cordiality, but made us liberal presents of partridges, fresh fish, frozen keta, jukol, berries, and roots, [67] which are collected in great quantities from the mouse-holes, and form one of their principal aliments.

In autumn, they go into the fields in search of these roots, and as soon as they find hollow ground, by stamping, they dig down, and lay open the store-rooms of these animals. They do not, however, empty them entirely, but leave the mice a third at least of their provision, probably with a view of not driving away such useful creatures. They terrify each other, indeed, with the saying, that the mouse which is deprived of all its sustenance, will hang itself in despair on the next tree; a tale which may perhaps have originated in the circumstance of a mouse having been entangled by accident in the branches of a tree, and having hung there till it died."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 end of May the snow had entirely disappeared, and Spring, in the course of a few days, made her welcome appearance; wild flowers and vegetables were every where springing up, and enlivening the dreariness of the last seven months. Even the rigging of the transport which was to carry me back, excited my interest, and reminded me of former times. The attention of the inhabitants was sufficiently engaged by the accession of fish, as herrings in the inner harbour, cod in the outer
222 haven, and seals every where. Some among them proceeded to the islands at the mouth of the haven, and brought in some thousands of eggs, while others were out in shooting parties, sending us in snipes,
132 wild ducks, and partridges. The wild garlic made its first appearance at Cape Garlick so early as the 15th of May.

000 Only a few individuals died in the hospital, most of them with the scurvy; the remainder were soon restored to sound health by Spring and fresh fish. Our evening walks were sometimes extended to the summits of the hills, where we took our tea or smoked a segar; but latterly the little place,—I cannot call it a town,—became overflowed from the melting of the snow, and it was with difficulty we could move about. In the month of June a vessel arrived from Canton and Manilla, in ballast, having failed in procuring a cargo of flour. By that vessel I received a most friendly letter from Mr. Urmston, the chief of the British factory, together

136 226 *March*, when it is washed away again by the high water arising from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers; 262 438 when they boil out the fat, which is as white as butter, and more delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other forts.

CHAP. X.

Of the BIRDS.

136 223 433 *KAMTSCHATKA* abounds in birds, but the inhabitants make less use of them than of roots and fishes: the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

237 223 bladders, which they use instead of corks to their nets. The way of catching them is singular, being angled for as fishes are, in the following manner: they fasten a thick iron, or wooden hook to a long rope or strap, baiting the hook with a whole fish, the point of which comes out near the back fin, and then throw it into the sea; this the cormorants observing gather about it in flocks, and quarrel among themselves who shall have the prize, until the strongest obtains it and swallows it; then being drawn on shore, they take out the hook and bait by putting their hands into its throat. Sometimes they fasten a live cormorant, which they call a decoy, to the rope, and that it may not swallow the bait, tie down its bill with a cord: the others seeing the decoy swim so near the shore, come with greater security to the bait. The *Kamtschadales* make needle-cases, and combs to comb their nettles, of the bones of their wings.

136 Besides the above-mentioned tchaiki, or cormorants, there is another species which haunt the rivers: these are called robbers, because they take the prey from the small birds; their tail is forked like that of the swallow.

136 787 The procellaria, or storm birds, are about the bigness of a swallow; their feathers are all black, except the tops of their wings, which are white; their bill and legs black. They haunt about the islands, and before a storm they fly low and skim the sea, and sometimes into the ships, which the sailors look upon as the sign of an approaching violent gale.

136 The stariki *, or glupisha, belong to this species. The stariki are about the bigness of a pigeon; have bluish bills, and bluish black feathers about the nostrils, which look like bristles; the feathers of the head are of the same colour, interspersed here and there with white ones, which are longer and thinner than the rest; the upper part of the neck is black, but the lower black and

* Mergus marinus niger ventre albo, plumis angustis albis aurium. STELL.

136 white speckled. The belly is white, the wings short, the large feathers of which are black, and the rest blue; the sides and tail are black; the feet are red and webbed; and the nails black and small: it 223 haunts about rocky islands, where it likewise builds its nest: The *Kamtschadales* catch these fowls easier than they do the tchaiki, or cormorants: they put on a fur-coat of a particular make, and letting their hands fall down, sit down in a proper place, and wait for the evening; when the birds returning from the sea seek to retire into holes for the night, and in the dark several of them fly into their furs, and are caught.

136 Among the birds described by Mr. *Steller* are the black starikis *, whose bills are as red as vermillion, the right side of which is crooked; it has a white tuft upon its head. He saw a third species in *America*, which was spotted black and white.

The glupisha are about the largeness of the common river cormorants; and are found upon the rocky islands, in high steep places; their colours are grey, white, and black; and are perhaps called glupisha, that is, foolish, because they frequently fly 237 into the boats. Mr. *Steller* says, that numbers of them are caught 223 in the fourth and fifth *Kurilski* islands, which the inhabitants dry in the sun; they squeeze the fat through the skin, which passes very 136 easily, and use it for burning. He likewise writes that all the rocky islands in the sea between *Kamtschatka* and *America* are covered with them. He has seen some as large as a goose, or an eagle; their bills are crooked and yellowish; their eyes are large like those of an owl; they are black intermixed with white spots over the whole body. He once saw, 200 versts from land, great numbers of them feeding upon a dead whale, which served them also to appearance for lodging; and in his passage through the *Penschinska* sea, he saw many of the glupisha, some of which

* Mergulus maximus alter supra niger cristatus, rostro rubro. STELL.

were

were black, and others white; but none of them came so near the 136
vessel as to be exactly observed.

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone 136
foxes, who watch for them; they breed in the month of *July*; 222
their eggs are green, about the bigness of a hen's egg, and 223
being boiled thicken a little, but are ill tasted; however the *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these crea- 252
tures are so void of apprehension, that, though they see the 262
next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

* Columba Groënlandica Batavorum. STELL.

† Corvus aquaticus maximus cristatus periophtalmiis cinnaberinis, postea candidis. STELL.

much.

252 262 ſuch a manner that, as victuals are there, it is not bad; they roaſt it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roaſted, they ſkin and eat it.

825 The natives ſay that theſe birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noiſe to the ſound of a trumpet.

136 223 CLASS II. *Of thoſe Birds which haunt for the moſt part about the freſh Water.*

The firſt of this claſs is the ſwan, which is ſo common in *Kamtſchatka*, both in ſummer and winter, that the pooreſt perſon can have no entertainment without a ſwan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in thoſe rivers that do not freeze.

136 Here are ſeven kinds of geeſe, which are diſtinguiſhed thus: large grey geeſe, gumenniki, ſhort necks, grey and ſpeckled, white necks, ſmall white geeſe, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr. *Steller* ſays; who likewiſe writes, that they come from *America*, and that he himſelf ſaw them paſs *Bering*'s iſland in great flocks, flying eaſt in the harveſt and weſt in the ſpring. In *Kamtſchatka* are principally found the large grey geeſe, the gumenniki, and the grey and ſpeckled; the ſmall white gooſe is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vaſt numbers of them; and the beſt down 223 is brought to *Jakutſki* from theſe places. They catch them at the time they caſt their feathers, in the following manner:—They build huts with two doors, near thoſe places where they moſt commonly ſit at night. The fowler putting a white ſhirt on, above his cloaths, ſteals as near the flock as he can; and ſhewing himſelf

1 [Urile, Corvus aquaticus maximus Cristatus periophtalmiis Cinnabarinis, postea Candidis. Stell.]

himſelf he creeps away upon his hands and feet towards the 223
hut: then going through it, and obſerving that the geeſe have followed him, he ſhuts the door behind him, and running round he comes in at the other door, which ſhutting likewiſe, he encloſes all the geeſe.

Mr. *Steller* obſerved in the month of *July* upon *Bering's* 136
iſland an eighth kind of geeſe, about the bigneſs of the white ſpeckled Its back, neck, and belly were white; its wings black; its cheeks white, yet ſomewhat greeniſh; its eyes black, with a yellow ring; the bill has a black ſtripe round it, and is red, with a knob like the *Chineſe* or *Muſcovy* geeſe: this knob is bare and yellowiſh, except that along it there is a ſmall ſtripe of bluiſh black feathers. The natives report that this ſort of geeſe is likewiſe found upon the firſt *Kurilſkoy* iſland; however they were never obſerved upon the continent.

The people of *Kamtſchatka* have different methods of catching 223
geeſe when they caſt their feathers; ſometimes they purſue them in boats; ſometimes they hunt them with dogs; but moſt of them are caught in pits, which they dig near thoſe lakes where the geeſe haunt, and cover up carefully with graſs: theſe the geeſe coming upon the ſhore fall into, and are caught.

There are eleven different ſpecies of ducks in *Kamtſchatka*; 136
namely, the ſeleſni, ſharp tails, tcherneti, plutonoſi, ſvaſi, krohali, lutki, gogoli, tchirki, turpani, and ſtone ducks: of which the ſeleſni, tchirki, krohali, and gogoli, winter among the ſprings; all the reſt come in the ſpring, and fly away in harveſt, as the geeſe do.

The ſharp tails are of that kind which writers call the *anas caudacuta, ſive havelda iſlandica.* They haunt in the bays of the ſea, or about the mouths of great rivers: they ſwim in flocks, and with their cry, which is extraordinary, make no diſagreeable muſick. Mr. *Steller* writes, that the larynx, or lower part of their throat, has three openings, covered with thin

being ſomewhat yellowiſh at the end, with a ſmall white ſtripe; the head is black, and upon its temples are ſmall white ſpots: it weighs about a pound and a half. 136

In the harveſt the females are found in the rivers, but none of the drakes: they are very ſtupid and eaſily caught where the waters are clear and ſhallow, for they do not fly away at the ſight of a man, but only dive, and therefore may be eaſily killed with poles, as I myſelf have frequently done. Mr. *Steller* ſaw ſeveral of this kind of ducks in the *American* iſlands.

They catch the ducks with nets in the following manner: in a wood that happens to ſtand between two lakes, or between a lake and a river, they cut a ſtrait paſſage, through which the ducks fly during the ſummer; here in the harveſt, when the fiſhery is over, the natives faſten to long poles ſeveral nets, which in the evenings they raiſe as high as the ducks are uſed to mount: round the nets a ſtring is drawn, by which they can reef them together, as ſoon as they find the ducks entangled; but they ſometimes fly with ſuch force and in ſuch numbers, that they break through. They likewiſe catch them in ſmall rivers with nets ſtretched acroſs the ſtream: but this is a method not peculiar to *Kamtſchatka*. 223

To this claſs belongs likewiſe the gagari, or columbus, of which there are four ſpecies *, three of which are large, and the other ſmall: the firſt of the largeſt has a tail; the ſecond a clay coloured ſpot upon its neck, a little above the crop: the third is called by *Wormius*, the northern lumme; and *Marſilius* calls the fourth the little lumme. The natives pretend to foretel the change of weather by their crying and flying; for they think that the wind muſt always blow from that point towards which they fly: however they are frequently deceived in their judgment. 136 825 787

* 1. Colymbus maximus. Gesn. Stell. 2. Colymbus arcticus lamme dictus. Worm. 3. Colymbus macula ſub mente caſtanea. Stell. 4. Colymbus ſive pedicipes cinereus. *Ejuſdem.*

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tungusi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkovoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kurilſki* languages.

CHAP. VI.

Of the LAND ANIMALS.

THE principal riches of *Kamtſchatka* conſiſt in the great number of wild beaſts: among which are foxes, ſables, ſtone foxes, hares, marmottas, ermins, weaſels, wolves, rein-deer wild and tame, and ſtone rams. Their fox ſkins in the thickneſs, length, and beauty of their hair equal, if not excel, all the foxes of *Siberia*; beſides there are in *Kamtſchatka* almoſt all the different ſpecies of foxes which are to be found in other places, ſuch as the red, fiery, blue-breaſted, or marked with a black croſs, the cheſnut, black cheſnut, and the like; and ſometimes white foxes are found there, but theſe very ſeldom. It is remarkable, that the more valuable foxes are the moſt cunning; ſuch are the black cheſnut, the blue-breaſted, and the fiery coloured; ſo that not only the *Kamtſchadales*, but even the *Ruſſians* find it difficult to catch them. It happened while I was at *Kamtſchatka*, that the Coſſacks tried for two winters to catch one black fox which frequented the Great River, without being able to effect it. The moſt uſual method of taking them is either by poiſon, traps, or bows. The poiſon is thrown in lumps in the freſh tracts; the traps are ſet upon the ſides of hills, baited with a live animal; and for the greater ſecurity two or three of the traps are placed upon one hillock, that whatever way the foxes approach they may fall into one of them; and this is found neceſſary, for thoſe, which have been once in danger from the ſtroke of this trap, proceed afterwards ſo cautiouſly, that they eat the bait without being ſeiſed; but, with all their cunning, it is difficult for them to eſcape the

136 224 177

ſeveral

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 ſeveral traps, which ſeize them ſometimes by the head, and ſome-
177 times by the foot. The method of killing them with the bow is thus: the hunters muſt know exactly how high to place it; when the bow is bent, it is faſtened to a ſtake driven into the earth near which the fox's tract is obſerved, and then a cord drawn from the bow-ſtring, is ſtretched very tight over his ordinary path; and ſo ſoon as this cord is touched with the foot of the fox, the bow is diſcharged, and the arrow pierces the very heart. Theſe are the inventions of the *Ruſſian* Coſſacks; for formerly the *Kamtſchadales* gave themſelves no trouble about the foxes, not valuing their furrs much more than dogs' ſkins. They pretend they could have killed as many as they wanted with ſticks, and that foxes were formerly ſo numerous in *Kamtſchatka*, that when they fed their dogs, they were obliged to
136 drive them away from the trough: and though this may ſeem
224 improbable, yet it is certain, that even now they are in great plenty near the forts, which at night they enter without any ſeeming apprehenſion of danger from the dogs of the country, which either cannot catch them, or, not being bred to it, do not mind them. It happened when I was there, that one of the inhabitants catched ſeveral of them in the pit where they keep their fiſh. The beſt time to hunt foxes is, when the earth is hard frozen, before the ſnow falls, as it is then difficult for them to dig out the rats' neſts, which they do when the earth is thawed, the rats
224 being their chief ſupport. The *Kuriles*, who live upon the
286 *Lopatka*, catch foxes in a manner peculiar to themſelves. They have a net made of the hair of whales' beards, compoſed of ſeveral rings; this is ſpread upon the ground, and to a ring in the middle they bind a magpye; round the net is drawn a cord, the ends of which are held by a perſon concealed in a pit near at hand, who, when the fox ſprings upon the bird, draws the cord and gathers together the net, which ſurrounds the fox as the drag net does a fiſh.

The

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
185 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

iſlands

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks 1his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. Gmel.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. Linn.

1 [Original torn. Probably "it worth"

especially when they gather berries. Sometimes, indeed, the bears eat up the berries which the women have gathered, and this is the only injury they do them. 136 752

In the season, when the fish enter the mouths of the rivers in vast shoals, great numbers of bears come down from the hills, and settle in proper places for catching them; which they do in such plenty, that they only eat and suck the bones of the heads, neglecting the bodies; but when this plenty is past, they are glad to gnaw the bones which they formerly despised. They frequently steal fish from the fishing huts of the Cossacks, although there is always a woman left to watch them. To her indeed they never do any hurt, satisfying themselves with what fish they can find. 136

Before the introduction of fire-arms, they used several devices for killing the bears. Cutting several billets of wood, they stop up the mouth of the den with them, which the bear draws in that his passage may not be shut up. This they continue until he is so straitened in his den that he cannot turn himself; then they dig down from above, and kill him with their spears. The *Koreki*, in order to catch the bears, seek out some tree that is crooked above, upon which they fasten a snare, and behind it place some proper bait; which the bear endeavouring to seize is held fast by the head or the paw. They place heavy logs of wood, in such a manner, that they will fall with the least touch and crush them. Another method is to lay a board driven full of iron hooks in the bear's tract, and near to that they place something that easily falls down; this frightening the bear by its fall, he runs upon the board with greater force; and finding first one fore paw wounded and seized by the hooks, he endeavours to free himself by beating the board with the other; thus both being fixed, he rests on his hinder legs, which causes the board to rise before his 224

eyes,

224 eyes, and perplexes him in ſuch a manner that he falls in a fury and beats himſelf to death. The people about the rivers *Lena* and *Ilime* have ſtill a more odd way of catching them. They place a nooſe upon the bear's tract or entrance to his den, faſtened at the end to a large log of wood; when the bear finds himſelf entangled, and that the log hinders his walking eaſily, he takes it up, and carrying it to ſome precipice, he throws it down with great force, which dragging him after it bruiſes him very much: however, he continues this 'till in the end he kills himſelf. This laſt method is ſomewhat like that which the *Ruſſians* uſe to preſerve their honey from the bears. They hang ſuch a log at the end of a long ſtring upon thoſe trees where the bees are hived; and when the bear, climbing up to get at the hive, finds himſelf interrupted by the log, he ſhoves it away; but returning it ſtrikes him again, and obliges him to toſs it with greater force, which makes it revert with ſtill greater upon himſelf. He continues this ſport ſometimes until he is killed, or falls from the tree.

The making bears drunk and killing them, or hunting them with proper dogs, is ſo common that I have no occaſion to ſay more about it.

One method is yet to be mentioned, which I have heard from people of reputation; namely that one man will kill ſuch bears as a whole company would be afraid to attack, and that without any other inſtrument than a ſtilletto, ſharp pointed at both ends, faſtened to a thong. The thong he wraps about his right arm up to the elbow; and taking the ſtilletto in this hand, and the knife in his left, he advances upon the bear, who, as uſual, ſtanding upon his hinder legs, and opening his mouth, attacks the hunter: but he, with great reſolution and addreſs, thruſts his hand into his throat; and placing there the ſtilletto, not only prevents him from ſhutting his mouth, but alſo gives him ſuch exquiſite

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 125 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

136 wolves are very ſeldom ſeen here, and therefore they are much
262 more eſteemed than the grey. Although the *Kamtſchadales*
237 are called univerſal eaters, yet they never eat the fleſh of either wolves or foxes. The deer and ſtone rams may be reckoned among the moſt uſeful of all the animals in *Kamtſchatka*, becauſe their ſkins are moſt uſed in cloathing. The inhabitants, however, kill but few in proportion to the great numbers that are in
136 this country. The deer live in moſſy places, and the wild rams
224 upon the higheſt mountains; ſo that the hunters of the wild rams
237 leave their dwellings in the beginning of harveſt, and taking all their families with them go to the hills, where they are employed in this chaſe until the month of *December*. The wild rams reſemble goats, but their hair is like the deers'. They have two horns that are twiſted round like the *Ordinſky* rams, but much larger. The horns of thoſe that are of full age weigh each of them from 25 to 30 pounds. They run very ſwiftly, throwing their horns back upon their ſhoulders; ſpring over rocks, and run upon the narrow ledges of the moſt dangerous precipices. Cloaths made of their ſkins are very warm. The fat upon their haunches is equal to that of the deer, and the fleſh is a moſt delicious food. Of the horns they make ladles, ſpoons, and other ſmall utenſils; and the horn entire they carry upon the road at their girdles, and uſe it for a bottle.

136 There are three kinds of rats; the firſt of which is of a brown colour, as large as the greateſt houſe-rats in *Europe*: but their cry is very different, reſembling the ſqueaking of pigs; otherwiſe they are very like our common rats. Of the ſecond kind there are but few, and theſe in the houſes, where they run about without fear, and live upon any offals. The third ſort have a diſpoſition ſomewhat like the drones among bees, laying up no manner of proviſion, but ſtealing their food from the firſt kind, which live in the fields, woods, and high mountains, in great numbers.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. VII.

Of the VITIMSKY SABLES, *and the Method of hunting them.* 000

ALTHOUGH the ſable-hunting of *Vitimſky* does not properly belong to the deſcription of *Kamtſchatka*, yet as in treating of the latter we have had occaſion to mention the ſable, I thought it might not be amiſs to give an account of the various methods of this chace in different places. The *Kamtſchadales* do not ſtir out for a fortnight or more after 224 a piece of ill-luck, or having hunted one day without game; 777 but the *Vitimſky* hunters ſpend almoſt the whole year in continual toil, and are very happy, if, in that time, they catch ten ſables for each man in company. It is true indeed, that ten common *Vitimſky* ſables are equal to forty of *Kamtſchatka:* but, 000 notwithſtanding, if the inhabitants of *Kamtſchatka* would take the ſame pains as thoſe of *Vitimſky*, they might exceed them in the profits of hunting; for ſables are as numerous in *Kamtſchatka* as ſquirrels are upon the river *Lena*. The *Vitimſky* hunting is the more remarkable for being ſubject to many rigorous laws and ſuperſtitious obſervations, which the hunters bind themſelves to obſerve.

Before *Siberia* was conquered by the *Ruſſians*, it abounded 136 with ſables; but, at preſent, wherever the *Ruſſians* are ſettled, none can be catched; for ſables retire at a diſtance from all inhabited places, and live in deſolate woods and mountains. The ſable hunters go up by the river *Vitime* and the two rivers 000 *Mama*, which fall into that river, as far as to the lake *Oronne*, which is upon the right hand, as high and higher than the great cataract, where the beſt hunting is. The fineſt ſables are caught upon

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 that if there be defects, they are ascribable to me.

During our stay at these baths and at the ostrog of Natchikin, our horses had brought, at different times, the effects which we had left at Koriaki, and we began to make pre-
224 parations for our departure. In this interval I had an opportunity of seeing a sable taken alive; the method was very singular, and may give some idea of the manner of hunting these animals.

At some distance from the baths, M. Kasloff remarked a numerous flight of ravens, who all hovered over the same spot, skimming continually along the ground. The regular direction of their flight led us to suspect that some prey attracted them. These birds were in reality pursuing a sable. We perceived it upon a birch-tree, surrounded by another flight of ravens, and

7: Lesseps T-3 (1787-88) 1790 Kamchadal

224 we had immediately a ſimilar deſire of taking it. The quickeſt and ſureſt way would doubtleſs have been to have ſhot it; but our guns were at the village, and it was impoſſible to borrow one of the perſons who accompanied us, or indeed in the whole neighbourhood. A Kamtſchadale happily drew us from our embaraſſment, by undertaking to catch the ſable. He adopted the following method. He aſked us for a cord; we had none to give him but that which faſtened our horſes. While he was making a running knot, ſome dogs, trained to this chace, had ſurrounded the tree: the animal, intent upon watching them, either from fear, or natural ſtupidity, did not ſtir; and contented himſelf with ſtretching out his neck, when the cord was preſented to him. His head was twice in the nooſe, but the knot ſlipped. At length, the ſable having thrown himſelf upon the ground, the dogs flew to ſeize him; but he preſently freed him-

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 himſelf, and with his claws and teeth laid hold of the noſe of one of the dogs, who had no reaſon to be pleaſed with his reception. As we were deſirous of taking the animal alive, we kept back the dogs; the ſable quitted immediately his hold, and ran up a tree, where, for the third time, the nooſe, which had been tied anew, was preſented to him; it was not till the fourth attempt that the Kamtſchadale ſucceeded *. I could not have imagined that an animal, who has ſo much the appearance of cunning, would have permitted himſelf to be caught in ſo ſtupid a manner, and would himſelf have placed his head in the ſnare
224 that was held up to him. This eaſy mode
433 of catching ſables, is a conſiderable reſource
651 to the Kamtſchadales, who are obliged to

* M. Kaſloff, who preſided in this chace, had the politeneſs to make me a preſent of this ſable, called in this country *ſobol*, and promiſed to add it to another, that I might bring a couple with me to France.

to

7:Lesseps T-3 (1787-88)1790 Kamchadal

535/825 whether their pantomime ballets were well executed; and they assured me that the dancers were the best in the country, and that the cries, gait, and various attitudes of the bear, were as accurate as life. Meanwhile, without offence to the amateurs, these dances are, in my opinion, not less fatiguing to the spectators than to the performers. It is a real pain to see them distort their hips, dislocate every limb, and wear out their lungs, to express the excess of pleasure which they take in these strange balls, which, I repeat it, resemble the absurd diversions of savages: the Kamtschadales may indeed, in many respects, be considered as of that rank.

224 Having given an account of the address with which these people counterfeit the postures and motions of the bear, who may be called their dancing master, it may not be unpleasing to relate in what manner they hunt

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 hunt this animal. There are various modes of attacking it; ſometimes they lay ſnares for it: under a heavy trap, ſupported in the air by a ſcaffolding ſufficiently high, they place ſome kind of bait to attract the bear, and which he no ſooner ſmells and perceives, than he eagerly advances to devour; at the ſame time he ſhakes the feeble ſupport of the trap, which falls upon his neck, and puniſhes his voracioufneſs by cruſhing his head, and frequently his whole body. In paſſing the woods I have ſeen them caught in this way; the trap is kept baited till it ſucceeds, which ſometimes does not happen for almoſt a year. This method of taking them requires no great boldneſs, or fatigue; but there is another mode, very much adopted in this country, to which equal ſtrength and cou-
224 rage are neceſſary. A Kamtſchadale goes
411 out, either alone or in company, to find a bear. He has no other arms than his gun, a kind

7:Lesseps T-3 (1787-88)1790 Kamchadal

224/411 a kind of carabine whose but-end is very small; a lance or spear; and his knife. His stock of provision is made up in a bundle containing about twenty fish. Thus lightly equipped, he penetrates into the thickest part of the woods, and every place that is likely to be the haunt of this annimal. It is commonly in the briars, or among the rushes on the borders of lakes and rivers, that the Kamtschadale posts himself, and waits the approach of his adversary with patience and intrepidity; if it be necessary, he will remain thus in ambuscade for a whole week together, till the bear makes his appearance. The moment it comes within his reach, he fixes in the ground a forked stick* belonging to his gun, by means of which he takes a truer aim, and shoots with

* The Kamtschadales are unable to shoot without this means of resting their gun, which, from the time required to prepare it, is evidently inconsistent with the celerity of this instrument, its chief advantage to a sportsman.

more

7:Lesseps T-3 (1787-88)1790 Kamchadal

224/411 more certainty. It is ſeldom that, with the ſmalleſt ball, he does not ſtrike the bear either in the head, or near the ſhoulder, which is the tendereſt part. But he is obliged to charge again inſtantly, becauſe the bear, if the firſt ſhot has not diſabled him, runs* at the hunter, who has not always time for a ſecond ſhot. He has then recourſe to his lance, with which he quickly arms himſelf to contend with the beaſt, who
224 attacks him in his turn. His life is in dan-
825 ger† if he does not give the bear a mortal thruſt; and in ſuch combats, it may be ſup-

* It is common enough alſo for it to take to flight, notwithſtanding its wound, and conceal itſelf in thickets or ruſhes, where it is traced by means of its blood, and found either dead or expiring.

† I was aſſured that when a bear triumphs over his aggreſſor, he tears the ſkin from the ſkull, draws it over his face, and then leaves him; a mode of revenge which implies, according to the Kamtſchadales, that this animal cannot bear the human aſpect; and this ſtrange prejudice ſupports them in the opinion of their ſuperiority, and ſeems to inſpire them with additional courage.

poſed

7:Lesseps T-3 (1787-88)1790 Kamchadal

761 posed the man is not always the conqueror;
224 but this does not prevent the inhabitants of this country from daily exposing their lives; the frequent examples of the death of their countrymen has no effect upon them: indeed they never go out, without considering before hand that it is either to conquer or to die; and this severe alternatiue neither stops nor terrifies them*.

224 They hunt other animals nearly in the same manner, such as rein deer, argali, or wild sheep, called in Russia *diki-barani*,

* They hunt the bear in this manner in every season of the year, except when the country is covered with snow; their method is then different. It is known that in winter the bear retreats to the den which he has fabricated during summer of the branches of trees; he continues there while the frost lasts, either asleep, or licking his paws. The Kamtschadales pursue him in their sledges, and attack him with their dogs, who oblige him to defend himself: he rushes from his lurking place to certain death; if he refuse to come out, his fate is equally certain, and he is crushed to death under the ruins of his den.

foxes,

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 foxes, otters, beavers, ſables, hares*, &c.
261 but they have not the ſame dangers to encounter; ſometimes they make uſe of ſnares, conſtructed of wood or iron, leſs than those which are ſet for bears, and reſembling in their ſimplicity our pitfalls; no other attention is neceſſary than that of viſiting them from time to time. The Kamtſchadales ſometimes lie in ambuſh, armed in the manner I have deſcribed; and the only hardſhip they experience reſults from their proviſion being exhauſted in conſequence of the long duration of their chace. They frequently ſubmit to ſuffer hunger for many days together, rather than quit their ſtations till they have obtained the end of their purſuit; but they amply repay themſelves for this faſting, by immediately devouring the fleſh of the animals †, and by the plea-

* Theſe animals are all deſcribed in Cook's voyage.

262. † The fleſh of bears, argali, and rain-deer, is conſidered by them as very wholeſome, the laſt particularly; I frequently feaſted upon it.

ſure

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 ſure with which they count over the ſkins they obtain from them.

136 They chuſe for their chace the ſeaſons
224 when the fur of the animal is in its greateſt perfection. Sables are hunted in the beginning of winter. Theſe animals live commonly in trees, and are called after their name; a part of the fur neareſt the ſkin being of the ſame colour as thoſe which they moſt frequent, as the birch, the fir, &c.

The moſt favourable ſeaſons for hunting foxes are autumn, winter, and ſpring. There are four different ſpecies. 1. The whitiſh red fox, which is leaſt eſteemed. 2. The red or bright red fox. 3. The fox called *ſévadouſchka*, the colour of which is a mixture of red, black, and grey. 4. The black fox, which is the ſcarceſt and moſt valuable: it is really of a deep and entire black, except that at the extremity of the fur upon the

7:Lesseps T-3 (1787-88)1790 Kamchadal

136 the back, which is the longeſt; a grey tint
224 is ſometimes perceptible. Some of this ſpecies are ſingularly valuable. There are two other ſpecies of the fox that may be added to theſe, though they are not regarded as ſuch in this country, the blue fox and the white fox. They are called in Ruſſia *galouboy peſſets*, and *beloy peſſets*; their fur is thicker than that of the reſt of the ſpecies. The foxes of the continent are in general more beautiful than thoſe caught in the different iſlands of the eaſt*, and produce an infinitely higher price.

Rein-deer are hunted in winter, and argali in autumn. Otters are extremely ſcarce in this country; but there is a great abundance of ermines, though, I know not for what reaſon, no pains are taken to catch

* The Aleutienne iſlands, Schoumagine iſlands, Fox iſlands, &c.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 * Their nets are made of pack thread, like ours; they
314 purchaſe it of the Ruſſians: there is another kind however,
439 which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

T:Lesseps T-3 (1787-88)1790 Kamchadal

797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka**, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

712 / R / 177 / .71 / 224 / 438 / 443 / 452 / 563

We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

22: Guillemard T-2 (1882) 1886 Kamchadal

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

136 this kind presents the only condition under which this sport is feasible, at least at this season. With the river choked with foul and dying fish, where every cast would foul-hook a fish that would be uneatable on landing, it is of course an impossibility. Here the stream was free from salmon, but though we hoped to obtain some trout or grayling, it seemed to be equally devoid of these also; and having spent an hour or two without getting a rise, we returned to camp. We found that one of our party who had been out after capercailzie had been fortunate enough to shoot a sable. The animal had been found by Verglaski, who had chased and treed it, and in spite of its not being, from a hunter's point of view, in full condition, it had been duly added to the bag. Our hunters told us that it was extremely rare to see sable at this time of year. The winter coat had begun to grow, and was, indeed, of tolerable
136 length and quite fast. In spring, although the winter fur may be
224 still on, the pelts are said to be quite useless, as the hair drops out even after the skin has been prepared. The animal measured twenty-seven inches in extreme length; the tail, which was not furnished with the thick brush so characteristic of the winter skins, seven inches; and the value of skin in the Petropaulovsky market was estimated by Afanasi at four roubles. The price given for winter sables is, as I have already stated, sixteen roubles.

The sable is always skinned from the tail—bag-shaped—and while performing this operation in the approved fashion of the country, we listened to a sermon on sables and sable-hunting from Afanasi. They are, he told us, for the most part of nocturnal habits, and, though they occasionally feed by day, generally spend that period of the twenty-four hours in holes at the roots, or in the trunks of trees. They dislike the presence of man, and are rarely to be found in the neighbourhood of the villages; their favourite resort being the depths of the forests least frequented by the natives. It is considered that the most inaccessible and least known parts of the country are the best hunting-grounds. They live on hares, birds of all kinds, and in short, almost any living

22: Guillemard T-2 (1882) 1886 Kamchadal

136 thing they can kill, but they are also said to eat berries, and even
224 fish. There are, indeed, but few animals, apparently, which do not live on salmon in Kamschatka. They have only one litter during the year, generally in the month of April, and bring forth four or five young at a birth in a nest in the holes of trees. When the hunter is bitten for the first time by one of these animals, the bite is almost invariably followed by severe illness; but on subsequent occasions no ill effects, with the exception possibly of slight inflammation of the wound, are produced.

There are various methods employed in catching sables, but a less number are trapped now than used formerly to be the case. Dogs are almost invariably employed, to run them down in the deep snow or to tree them; and they are also smelt out by these trained animals in their holes at the roots of trees. The great object is to tree the sable if possible. The hunter then surrounds the base of the tree with nets, and either shakes down his quarry or knocks it off the boughs with sticks. If it does not fall into the net it is run down by the dogs, or compelled again to take refuge in a tree. Should the tree be too high for this method to be successful, it is cut down, or the sable is shot; but the hunters generally avoid the use of the gun if possible, as it is apt to spoil the skin.

The hunters usually start on their winter's expedition towards the end of September, if their destination be a distant one. If it be in better known country and closer at hand they wait until the first snows have fallen, and do not leave before the middle of November. They train dogs especially for the purpose, and a good sable dog is one of the most valuable of a Kamschatkan hunter's possessions. A catch of twenty sables in a season is considered exceptionally good. Jacof Ivanovitch and one of our horse-boys, in company with two other hunters, had on the preceding winter tried some new ground on the shores of the Kronotsky Lake, and had been particularly successful. Jacof had only succeeded in killing fifteen, but our horse-boy had bagged no less than forty; and the total

22: Guillemard T-2 (1882) 1886 Kamchadal

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

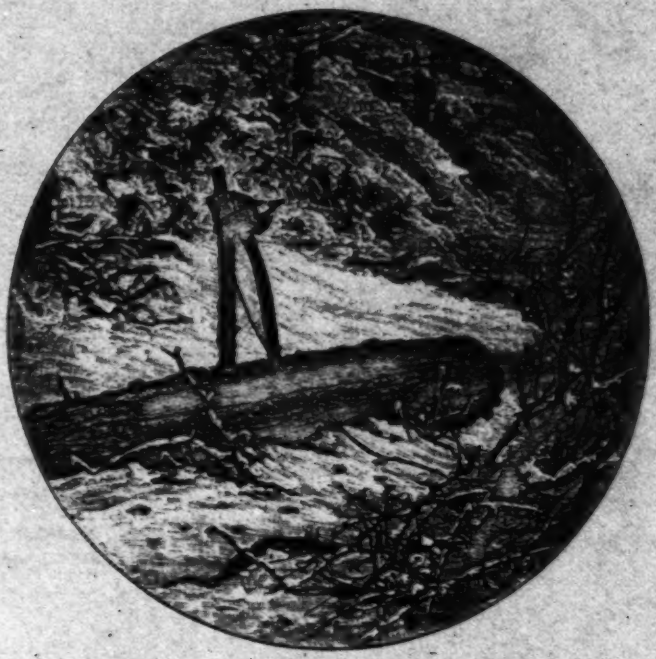
[see page 74--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

133 river, guarded on the right by Kojerevska, which is inferior to it in
361 altitude by fifteen hundred feet. To the extreme right lies Tolbatchinska, and above the intervening stretch of flat forest land the solitary peaks of the two isolated volcanoes I have before mentioned are visible some fifty miles away.

We had but little difficulty in getting the canoes requisite for

224



FOX TRAP.

constructing our raft upon somewhat less risky principles than the one that had, thanks to our good fortune, borne us the last seventy miles of our journey in safety. We reverted once more to our old plan of dividing forces, and late in the morning recommenced our voyage amid the firing of many salutes from the guns of the Kojerevskans, to whom we were really sorry to have to
000 bid adieu. At 4 P.M. we reached Uskovska, a hamlet containing

22: Guillemard T-2 (1882) 1886 Kamchadal

224 At 4 P.M. we reached Uskovska, a hamlet containing
361 thirty souls only. Landing to rest, we noticed here, for the first time, a fox trap of simple construction, which is said nevertheless to be very effective. A broad mortice is cut in an ordinary rough log, and in the longitudinal hole thus produced a spring is placed, composed of two pieces of raw hide twisted together, which impels a barbed prong. This is discharged by means of a trigger, to which a string is attached leading across the animal's usual track. Although Kamschatka is a country which would appear to be peculiarly adapted for trapping, it seemed to us that it was not undertaken to anything like the extent that might be expected.

000 We camped eighteen versts below Uskovska, in good spirits at the improved condition of our affairs and our rate of progress down the river. We had need of them, for after dinner, on inspecting our last case of photographic plates, which had been packed with all possible care in blankets, we found that the greater number of them had been broken to atoms. Such are the results of pack-horse travelling! Of the whole lot but two remained, and these, with one or two we had left over from another case, were all we had to last us for the rest of our journey! It was a cruel disappointment. We were in the midst of scenery which for magnificence was almost without parallel, and which we could never have a hope of seeing again. For some days the volcanoes, which at this season of the year are often invisible, had shown themselves without a cloud. And now, just as we were approaching them, and arriving at the very part of our journey of which we most desired to have a record, we were doomed to failure—a failure the harder to be borne from the fact that our limited time precluded any possibility of sketching.

It was blowing hard from the W.S.W. as we embarked at daylight on the following morning, and before long the wind had freshened considerably. The thermometer was not lower than usual, but the keen wind penetrated our garments and froze us to the bone. It was in our favour, and hoisting a portion of one of the tents as a sail, we sped along merrily. Soon, however, it became evident

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 252 262 The natives are prevented by law from barring the river in the lower part of its course, and here the salmon are taken chiefly with seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 224 The low and muddy shores of the river in this part of its course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

22: Guillemard T-2 (1882) 1886 Kamchadai

501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

27: Sauer--302 T-2 (1789-93) 1802 Kamchadal
116, 133, 224, 484

"The Ilmitsh, commonly called the Paratounca, has its rise from near the Viluitshiskoi Sopka (called in Cook's last voyage the Paratounca); and from a lake near the Tareinskoi harbour, it makes a circuit of 85 versts, and discharges itself into the bay of Avatsha, only three miles in a direct line from its source: it is navigable for boats all the way; but Iwas fourteen hours in traversing the whole of this river, from the lake, in a canoe. The villagers of Paratounca go on the chase of deer, argali, bears, &c. about the source of this river, by passing down the stream into Tareinski harbour, and hauling their canoes over the plain already mentioned into the lake. An immense number of rivulets from the mountains flow to the east into the ocean, but none of them are either remarkable, or have their banks inhabited."

28: Sarytschew--60 T-1 (1789-90) 1806 Kamchadal
116, 136, 224

"At the entrance of the bay of Awatska, we passed a light-house, erected on a lofty rocky prominence, on the left of which was an insular mountain of stone, called Staritschkow, after the name of a bird that frequents it in great abundance. The staritschkow is a bird about the size of a pigeon, with a bluish bill, and small feathers, of a bristly kind; its head is of a purple colour, having a circle of white feathers in the middle, which are thinner and longer than the rest. Its neck is black above, with white spots underneath. Its body is white, the short large feathers of its wings blackish, and the rest blue; its sides and tail black; its feet red, and trebly indigited with a web between each, and its claws black. On the little islands of Kamtschatka they are found in vast numbers, and are caught by the Kamtschadales with great facility. Besides this bird, there are also sea-parrots, mews, and urilas, the latter of which paid us a visit of curiosity as before, and then disappeared."

how many ſables or other beaſts their party has killed, and if any of their parties have done any thing contrary to his orders and the common laws. Theſe crimes they puniſh differently: ſome they tie to a ſtake, others they oblige to aſk pardon of every one of the company; a thief they beat ſeverely, and allow him no ſhare of the booty; nay, they even take his own baggage from him, and divide it among themſelves. They remain in their head-quarters until the rivers are free of ice; and after the hunting they employ their time in preparing the ſkins. As ſoon as the ice is all gone off the rivers, they ſet out, in thoſe little boats which they came in, on their return home, where they give the ſables to the ſeveral churches to which they promiſed them; and then, having paid their tax-furrs, they ſell the reſt, dividing equally the money, or goods, which they receive for them.

CHAP. VIII.

Of the SEA BEASTS.

UNDER the name of ſea beaſts are here underſtood ſuch animals as are called amphibious, which, although they live for the moſt part in the water, frequently come upon the dry land, and upon, or near it, bring forth their young. Water beaſts may be divided into three claſſes: 1ſt, Thoſe which live in freſh water lakes, and rivers, as the otter. 2d, Thoſe which live in freſh or ſalt water, ſuch as ſeals. 3d, Thoſe which are never found in freſh water, ſuch as ſea beavers, ſea cats, and others.

Although otters be very common in *Kamtſchatka*, yet the price is not low; a very indifferent ſkin will coſt a ruble. They

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

225/237 commonly hunt them with dogs when the ſnow comes in drifts, and they wander at too great a diſtance from the river. They uſe their ſkins to make borders round their garments, but principally to preſerve the ſable-ſkins, which are obſerved to be preſerved better, when wrapt in otter-ſkins than any other way.

136 It is incredible to think what a number of ſeals there are in the ſeas and lakes of that country, eſpecially when the fiſh come up the rivers, which they follow in droves, not only to the mouth, but even far up the ſtream. So numerous are they that all the iſlands or ſand-banks are quite covered with them, inſomuch that ſmall boats are in great danger near theſe places. When the ſeals obſerve any boat approaching they throw themſelves in great numbers into the water, which makes ſuch a motion in it as will overſet the canoes or ſmall boats, if they go at once into it. No animal has a more diſagreeable cry, and their noiſe is inceſſant.

There are reckoned to be four ſorts of this animal; the very largeſt of which is catched from 56° to 64° of north latitude. This ſort only differs from the others in its bulk, which exceeds that of a large ox. The ſecond ſpecies is about the ſize of a yearling bullock. Their ſkin is of different colours, ſomething like the ſkin of a tyger; having ſeveral ſpots of equal largeneſs on the back, with a white and yellowiſh belly. Their young ones are as white as ſnow. The third is yet leſs than the former. Its ſkin is yellowiſh, with large cherry-coloured circles, which take up near the half of its ſurface. The fourth kind is ſeen in the large lakes of *Baikaal* and *Oronne*. Its ſize is like thoſe that are found near *Archangel*; and their colour is whitiſh.

They are very vivacious: I ſaw one, that was taken by a hook in the mouth of the Great River, throw itſelf upon people with great fierceneſs, even after its ſkull was broken into pieces. I obſerved that he was no ſooner brought on ſhore than

than he began to try to run again into the river; and when he found that this was impoſſible, he began to weep; and when they beat and bruiſed him, it only made him more fierce and wild. 136

The ſeals never go farther from the ſhore than 30 leagues; and are moſt commonly to be found near the mouths of great rivers or bays: they will follow the fiſh 80 verſts up a river. They bring forth only one young one, which they nouriſh with two breaſts. The *Tunguſi* give the ſeals' milk to their children for a medicine. The old ſeals cry like one that ſtrains in vomiting, and the young like people groaning through pain. When the tide goes out they lie upon the dry rocks, and in play puſh one another into the water; but when they begin to be angry they bite one another very cruelly. They ſleep very ſound: but, being awakened by the approach of any one, they are in very great fear; and haſtening towards the ſea, to make the way ſmoother, as is ſuppoſed, they vomit out water.

There are different ways of killing them: In the rivers they ſhoot them with ſcrewed-barrelled guns; but they muſt be careful to hit the head, becauſe a hundred bullets will not do them the leaſt hurt in any other place, as they all lodge in the fat that covers their body. They ſearch for them upon ſhore, and ſurpriſing them in their ſleep kill them with clubs: or when they ſleep, laying their ſnout upon the ice, they drive a knife quite through the ſnout, which being faſtened to a long thong they drag the animal out. 225

The ſeals are not ſo dear as one would imagine the many uſes they put them to ſhould render them; for, beſides the uſe of their fat and fleſh, the ſkins of the larger ſort ſerve for ſoles of ſhoes. The *Koreki*, *Olutores*, and the *Tchukotſkoi*, alſo make boats or baidares with them of different ſizes, ſome even ſo large that they will carry thirty men. Theſe boats have this advantage over 237

thoſe

Although in appearance and ſize this animal ſeems to be very 136
dangerous, and marches with ſuch a fierce mien that he looks like a true lion, yet is he ſuch a coward, that at the ſight of a man he hurries into the water; and when he is ſurpriſed aſleep, and awakened either by a loud cry or blows with a club, he is in ſuch fear and confuſion, that in running away he falls down, all his joints quaking with terror; but, when he finds no poſſibility of eſcaping, he will then attack his enemy with the greateſt fierceneſs, ſhaking his head and roaring very terribly; and then the boldeſt muſt ſeek to ſave himſelf from his rage. For this 225
reaſon the *Kamtſchadales* ſeldom kill the ſea lions at ſea, unleſs when they can ſurpriſe them ſleeping there, but generally upon land; and when they find them aſleep on ſhore they approach them with great caution, going againſt the wind. But none dare undertake this game, but ſuch as can truſt to their ſtrength or their heels. Stealing upon them, they ſtrike a knife into their breaſt under their fore paw; the aſſiſtants in the mean time tying a cord made of ſea calf's ſkin, which is faſtened to the knife, about a ſtake. Then every one runs off as faſt as he can, and endeavours at a diſtance to wound him with arrows, or knives, which they dart at him; and at laſt, when his ſtrength is quite waſted, they diſpatch him with clubs.

When they find them aſleep at ſea, they ſhoot poiſoned arrows at them, and get off as faſt as poſſible. The wounded animal, unable to ſuffer the pain ariſing from the ſalt water in the poiſoned wound, runs himſelf aſhore, where they kill him outright with darts or arrows; or if the place is not ſafe for ſuch an attack, they wait until he dies of his firſt wound, which follows in 24 hours. This game is ſo honourable among the natives, 534
that the man who has killed moſt of theſe beaſts is eſteemed the 225
greateſt hero: for this reaſon many engage in this dangerous hunting, not only for the fleſh, which is looked upon as very delicate, but rather for the honour that attends it. Two or

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

225 three ſea lions are a great load for their boats; and, as it is
302 eſteemed diſhonourable to leave any game which they have caught, they ſometimes ſo overload their boats, that, though they are very expert in the management of them, they and their game go to the bottom together. In theſe veſſels they go to the deſert iſland *Alaide*, which lies out at ſea about thirty miles, and are ſometimes carried four, five, and even eight days without ſeeing any land, expoſed to the cold of theſe climates; and without any compaſs, they return to their habitations by obſerving the ſun or moon.

237 Of the ſkins of the ſea lion they make cords, ſhoe-ſoles, and
136 ſhoes. The female has two, three, and ſometimes four young ones. They couple in the months of *Auguſt* or *September*; and are pregnant about ten months, as they generally bring forth their young about the beginning of *July*. The male treats the female with great tenderneſs, not like the ſea cat, but by fondneſs endeavours to gain her affection. Both male and female ſeem to take very little care of their young, frequently ſtifling them under their paws as they ſuck; nor do they ſhew
136 any concern at ſeeing them killed before their eyes. The young are not lively nor full of play, like moſt other young animals; but are almoſt continually aſleep. Towards the evening the male and female ſwim out to ſea with their brood, but not far from the ſhore. The young climb upon the mother's back, and reſt themſelves; the male in the mean time playing about toſſes the lazy puppies into the water, to oblige them to learn to ſwim. Some of them have been thrown into the ſea, but inſtead of ſwimming away they haſten again to land. They are twice as large as the young of the ſea cat. Although theſe animals naturally run from a man, yet it has been obſerved that they are not always ſo wild; particularly when their young have ſcarcely learned to ſwim. Mr. *Steller* lived ſix days in a high place amongſt whole herds of them, and out of his hut ſaw

ſeveral

000 The manner of catching them in *Bering's* island was this: They first struck out their eyes with stones, and then killed them by beating out their brains with clubs: but this was a work of so much labour, that three men were hardly able to kill one with 300 strokes; and though sometimes the skull was broken in pieces, and the brains came out, and all their teeth beaten out, yet they would keep their place, standing upon their hinder paws, endeavouring to defend themselves. One of them thus miserably treated was left to see how long it would live, which it did full two weeks without quitting its place.
225 They seldom come ashore about *Kamtschatka*; so that the inhabitants chace them in boats, and throw darts or harpoons at them, which stick in their body; to this harpoon is fixed one end of a rope, and the other is in the vessel; and by this rope they draw them towards the boat; but here they are to be particularly cautious whenever they chace one, if he comes near, not to suffer him to fasten upon the side of the boat with his fore paws, and overturn it; to prevent which some of the fishermen stand ready
136 with axes to cut off his paws. Several of these animals die of old age, but the greatest part of the wounds they receive in the quarrels that happen among them; of which there are sometimes so many, that the shore is covered with bones.

The sea beavers * have not the least resemblance of the other beavers; but the people formerly gave them that name from their downy hair, which resembles that of the beaver. They are as large as the sea cats; their shape resembles the seal, and their head the bear; their fore feet are longer than their hind feet; their teeth small; their tail short and flat, and sharp towards the point; their hair is thick and black as pitch,

1. [the sea cats]

* Lutra marina.

but

but in the old ones it turns grey. The young ones have 136
their hair long, brownish, and very soft. This is the most peaceable of all the sea animals; it never makes any resistance, but endeavours to save itself by flight. The females are very affectionate to their young, and carry such as cannot swim upon their belly between their fore feet; for until the little ones can swim themselves the mother swims upon her back. When the fishermen pursue them, they never quit their young' till the very last extremity; and if they should happen to slip them they presently return to where they hear them cry; so that the fishers endeavour to kill or catch the young, as the most effectual method of taking their dams. They have three different ways of catching 225
them: 1st. By nets placed among the sea cabbage*, whither the beavers retire in the night time, or in storms. 2dly, They chace them in their boats, when the weather is calm, and kill them in the same manner they do sea lions or sea cats. The third method is upon the ice, which in the spring is driven on the coast by the east wind; and this last is so general, that when the ice is driven so strongly upon the shore that the people can pass upon it with snow shoes, they consider it as an acquisition of great treasure, and all the inhabitants upon the coast hunt and kill vast numbers, as they stalk along the ice seeking an opening to get into the water. However, such a drift of ice upon the coast does not happen every year, but when it does, they call it a good year; for the natives, Cossacks, and merchants, find a great advantage from this trade. The *Kuriles* did not 237
esteem the skins of beavers more than those of seals or sea lions 291
before they saw the value that the *Russians* put upon them; and even now they will willingly exchange a dress made of beavers'

* Fucus marinus.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 When they have eaten their fill, they lie asleep upon their backs. As soon as the ebb begins they retire to the sea, fearing to be left upon the shore. In the winter time they are frequently crushed by the ice against the rocks, and thrown out upon the beach. This happens during a storm, when the wind is upon the shore. At this season they are so lean that one may count all
225 their ribs and vertebræ. They are caught with great iron hooks,
136 something like the fluke of a small anchor. This hook is carried by a strong man in a boat with three or four rowers, who when he comes among the herd strikes into one of them. Thirty men that are left upon the shore, and hold one end of a rope which is fastened to the hook, draw the manati towards the land; and in the mean time those that are in the boat stab and cut it 'till it dies. I once saw some of the fishers cut off the flesh from the creature, while it was alive, who all the while struck the water with its paws with such force that the skin was torn off them; but at last it expired. It is easier to catch the old ones than the young: for the last are more active, and the skin being softer the hook frequently looses its hold. When one of them is struck, and struggles to clear himself of the hook, those of the herd that are nearest to him come to his assistance: some overturn the boat by getting under it; others lay themselves upon the rope, as if they could break it; and others endeavour to strike out the hook with their tails, which sometimes
136 succeeds. The love that is between the male and female is extraordinary; for after the male has used all methods to assist and rescue the female, he follows her even dead to the very shore, and has been observed sometimes even after two or three days to remain by the dead body. This animal cannot be said to low, but rather brays hard, which is particularly observable when it is wounded. It cannot be said how sharp

their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 The whales here are from ſeven to fifteen fathoms long. We can give no account of the different ſpecies of whales at *Kamtſchatka*, few of them being caught here except in the northern parts by the *Koreki* and *Tchukotſkoi*, who feed upon their fleſh. In the year 1740 a whale was brought by the flood into the mouth of the *Bolſkoi* river; but ſome Coſſacks obſerving it, went out in boats, and cut it all to pieces; ſo that next day when I came, to my great diſappointment, I neither found fleſh nor bones; for theſe people, who had cut off the fleſh, being afraid of puniſhment for doing it without permiſſion, had buried the bones to conceal their crime. *Steller* obſerved that more whales were thrown on the eaſtern than on the weſtern ſhore, and more in the harveſt than in the ſpring.

225 171 The different people have different ways of catching them: the *Kuriles* by throwing their poiſoned darts into them: the *Olutores* catch them in nets, made of thongs of the ſea horſe ſkin as broad as a man's hand, which they dry in the ſmoke. Theſe they ſet in the mouths of the rivers, and the whale purſuing other fiſh entangles himſelf in them. With theſe thongs he is dragged to the ſhore by the h-'r of numbers who aſſemble on theſe occaſions, and always p.rform certain ceremonies. They bring out of their common huts a wooden whale about two feet long; then building a new hut they place this image in it, uſing ſeveral conjurations. After this they light a lamp, and appointing ſome people to look after it, give orders that it be not allowed to go out from ſpring to harveſt, which is as long as the fiſhing ſeaſon laſts. They then cut the whale into different portions, which, looking upon it as their moſt delicate proviſion, they prepare in the following manner:—They dry the lean in the ſun; and the ſkin, which they ſeparate from the fat, they beat with hammers, and of it make ſoles to their ſhoes, which wears extremely well. They ſmoke the fat parts, and

and cleaning the guts, they fill them with the oil which runs in cutting the fish, or which they melt from the blubber, having no other vessels to keep it in. 171 225

The *Tchukotskoi* kill whales with a harpoon in the same manner as the *Europeans* do, and they catch so many that they never eat those whales that are thrown dead on shore, as some of the neighbouring people do, but only extract their fat for burning. Although the *Tchukotskoi* have large herds of deer, which might be sufficient for their sustenance, yet they are the greatest whale fishers of any people in this part of the globe, and look upon the fat of the whales as the greatest delicacy; besides, having great scarcity of wood, they use it for burning. They make themselves shirts of the intestines of the whales, like the *Americans*; and use them for vessels, like the *Olutores*.

The kasatki, (falsely called the sword-fish) which are numerous in these seas, are very useful to the inhabitants, for these fish frequently either kill or drive the whales on shore. *Steller* had an opportunity of seeing an engagement between the kasatki and whale, both at sea and upon *Bering*'s island. When the kasatki attacks the whale he makes him roar so that he may be heard some miles. If the whale makes off, the kasatki follows him at some distance 'till great numbers of them gather together, and make a general attack. It is never observed that such whales as are thrown on shore have any part eaten out of their bodies; so that this war between the whales and the kasatki must proceed only from a natural enmity. The fishers are so much afraid of these animals that they not only never throw any darts at them, but if possible avoid going near them; nay, they even make offerings to them, begging that they will not hurt them: for if irritated they sometimes overturn their boats. 136 825

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 136 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

● 225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

17: Heizer--419 E-3 (no date) 1943 Kamchadal
116, 171, 225

" Whaling is of general occurrence on the east Asiatic littoral from East Cape at Bering Strait at least as far south as Japan. It is commonly considered a general feature of Eskimo culture, though some groups, by reason of continental cultural orientation or environmental restrictions, do not indulge in it....

On the Pacific littoral of northeast Asia there is a small, restricted area where whaling was accomplished by the relatively simple procedure of throwing a lance into the whale, the stone point of which was detachable and smeared with deadly aconite poison. The area is that of the Kurile Islands and the Kamchatkan coast. The Koryak to the north and Japanese to the south employed different methods."

17: Heizer--421 E-3 (no date)1943 Kamchadal-1-4
116, 225, 278

"Steller [CMC: G.W. Steller. Beschreibung von dem Lande Kamtschatka. Frankfurt and Leipzig] (1774, pp. 98, 103, ftn. (a)) has left the best description of Kamchadal whaling: (2)

2. The accounts of Asiatic whaling by Tooke[CMC: W. Tooke, View of the Russian Empire during the Reign of Catherine the Second and to the Close of the Eighteenth Century, 3 vols. Dublin] (1801, vol. 3, pp.18-20) and Krashenninikov[CMC: S. P. Krashenninikov. The History of Kamtschatka and the Kurilski Islands, with the countries adjacent, James Grieve. Gloucester](1764, pp. 138-139) are similar to Steller's fuller description, which I offer here in translation from the German edition.

Whales are also taken in the neighborhood of Kamtschatka in the number of ways which I shall cite here, however inconceivable such seem and are astonishing in view of(the size of) these great sea animals. Around Lapatka (3) and the

3. Cape Lopatka, the southernmost tip of the Kamchatka Peninsula.

Kurile Islands the inhabitants travel into the sea in baidars, (4) seek places at

4. This word ordinarily refers to skin-covered boats; here it means wooden boats with dugout hulls and built-up side planks (cf. Torii, [CMC: R. Torii. Les Ainous des Iles Kouriles. Journ. Coll. Sci. Tokyo Imperial University, vol. 42] 1919, pp. 178-183).

which these are accustomed to sleep; as many animals as they meet, so many do they shoot with poisoned arrows, whereby they suddenly puff out (become animated?) storm and rage frightfully and go (down) into (sound) the sea, and it happens now and then, that one or more, at times even none of them, are cast upon the shore. When the Kuriles obrain a whale, (5) no one begins to cut it up until all are

5. Presumably this refers to the moment when the whale, previously attacked, has come ashore as already described by Steller.

assembled; first shamanizing takes place, each one puts on his best clothes, and carries home his portion, after this one yurt entertains the other. Before and after the entertainment they give their dance, and otherwise delight themselves in all sorts

of ways, which will be treated in what follows.

As soon as a whale comes to the land in Kamchatka, they fasten it with a thin line to a little stick stuck in the sand, and believe certainly on this account, that neither the spirits nor the sea nor Gamuti, or spirits of the land, can any longer have any claim to it.

Further descriptions of the Kamchadal whale fishery are passing references, (6) or

6. Steller, 1774, pp. 100, 103, ftn (a); Krashenninikov, 1764, p. 141. Von Langsdorff [CMC: G.H. von Langsdorff, Voyages and Travels in Various parts of the World, during the years 1803...1807, London] (1813, p. 262) and Petroff [CMC: Ivan Petroff. Report on the Population, Industries and Resources of Alaska. U.S. Department of the Interior, Bureau of the Census](1884, p. 146) deny Kamchadal whaling. By Von Langsdorff's time the practice may have been forgotten.

are seemingly traceable to Steller's original account.

Whaling in the Kurile Islands between Yezo and the Kamchatka peninsula is recorded, but not described adequately. Krashenninikov says (1764, p. 138; see also Steller,

1774, p. 98) the 'Kuriles (kill whales) by throwing poison darts into them.' The same author (7) notes that the southern Kurilians (i.e., Ainu) feed on whale'fat. Shelekhoff

7. Krashenninikov, 1764, p. 39. La Pérouse, [CMC: J.F.G. de La Pérouse. A Voyage round the World, performed in the years 1785, 1786, 1787, 1788 by the Boussole and Astrolabe, 2 vols. London] 1799, pp. 59-60, 75. Drift whales cast ashore on Etorup are mentioned in Neue Beschreibung, [CMC: Neue Beschreibing der Kurilischen Inseln, in P.S. Pallas, Neue Nordische Beytrage, vol. II, St. Petersburg and Leipzig] 1782 p. 134.

[CMC: G. Shelekhoff. Voyages of G. Shelekhoff, from the Year 1783 to 1790, St. Petersburg. MS translation by Ivan Petroff in Bancroft Library, University of California, Berkeley](1812, vol. 1, p. 128) states that the Japenese receive whale oil from the Matmai Kuriltze. (8)

8. The Kurile Islands, except the two northernmost opposite Cape Lopatka, were occupied by Ainu. These two northern islands, Paramushir and Shumshiri, were inhabited by Kamchadal. There are a few slight indications that others of the Kurile Islands may have been occupied by Kanchadal, or, at any rate, strongly culturally influenced from Kamchatka."

"Steller (1774, pp. 235-236, ftn.a) says of the southern Kamchadal, [CMC: The following quote from Steller given in German in the text: 'Nonetheless such were very much feared because they (i.e. the Kamchadal) poisoned them by gluing on powder from the root of the Napelli (Aconitum napellus?) which in Russian is called Ludik.] Shelekhoff (75) says, ' Paramushir Island has a plant called Liutik, with the roots of which the na-

75. Shelekhoff, 1812, vol1, p. 90. Neue Beschreibung...1782, p. 118. Paramushir was occupied by Kamchadal. In fact, at least the two northernmost islands of the Kurile chain (Paramushir and Sumshiri), and perhaps still others, were not held by Ainu, but by Kamchadal. This implies Ainu-Kamchadal contacts and probable cultural interchange. We know, for example, they both hunted whales in the same manner.

tives paint themselves and into its juice they dip the points of their arrows, to kill animals.' Krashenninikov's statement (1764, p. 42) about 'poisonous herbs, whose roots are as yellow as saffron and as thick as rhubarb, and are well known to the inhabitants of the first Kurilskoy island...' may refer to the same plant. Lewin(76)identified the

76. Lewin, [CMC: L. Lewin. Die Pfeilgifte. Leipzig.] 1923, pp. 174-175.

'zgate' spoken of by Krashenninikov (77) as Anemone ranunculoides. Thus, there seems

77. Krashenninikov, 1764, pp. 92-93.

to be not a single clear reference to aconite poison from Kamchatka, but of Anemone. There can be little doubt but that this poison extracted from roots is related to the high development in the area to the south and southeast."

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 736 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught.

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled.

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe.

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not

136 so be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn
262 about the thickness of sugar ropes; and the fishing begins about
576 the middle of *May*, and lasts six weeks. The *Kamtschadales*
574 esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about
136 the middle of *June*. The *eukol* that is made of it, though very
226 pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the shoals appear at the mouths. The second is, that this fish is more plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into these rivers that communicate with the lakes. Here the inhabitants catch them by nets, dams, or other methods.

1. [chivats i]

The

The third kind of this fish is called keta or kaeko; which is 136
somewhat larger than the narka. The flesh is white; the head 262
flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *eukol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas.

The gorbushe, or crook back, follows or sometimes accompanies 136
the keta. This fish is more plentiful than any other whatever; 262
it is about eighteen inches long, and flattish; its flesh is white; 231
its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs.

The last of these kinds that come on shore is called white fish. 136
This fish both in bulk and appearance is very like the keta; they 825
differ in this indeed, that the keta has no spots, and the white 226
fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have spawned, they take all care to provide for their own safety, re- 136
tiring immediately to deep places where there are warm springs; 226
and they are chiefly found in the springs near the *Bolscheretskoi* river

 and

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 and the *Opalskoy* lake: they are caught likewise during the whole
226 winter in those springs that run into the *Kamtschatka* from the south; and near to where the old lower fort of *Kamtschatka* stood they also abound, which is a great relief to the inhabitants. I myself was at this fishery in the end of *February*; however I found the fish at that time dryer and not so well tasted as in the harvest. This fish eats very well, either salted, dryed, or smoaked. It is caught frequently in the same net with the keta
227 and narka; and those which they use for this fishery are made of yarn about half as thick as that with which they make the nets for the chavitsi, and the meshes are about an inch and a half wide.

136 All these different species of fish change their colours, turn lean and ugly, their snout bends, their teeth grow, and a scurf appears upon their skins. The chavitsi, narka, and white fish, change their silver colour to a red; the keta turns likewise red, stained with black stripes. Their fins and tails become reddish and blackish; in one word, they would never be taken for the same fish that enter the rivers, if these changes were not certain. The gorbushe alone preserves its silver colour, and, whenever it loses that, it dies.

It is incredible with what eargerness they go up the rivers, particularly the gorbushe. When they come to any place where the stream is strong, and those that are weak find it impossible by their own strength to get up, they fasten their teeth upon the tail of some that are stronger, that they may be drawn up by them; so that several of these fish are found which have their tails bitten.

The true salmon may always be reckoned one of those fish that come in shoals; and are found to go up the rivers *Kompakfve*, *Bircumkin*, and *Etchi*. I never saw these fish indeed, but have heard a great deal of them. Mr. *Steller* writes, that when

136 greatly: this obſervation probably holds in all kinds of ſalmon
137 trouts. In the fourth year alſo, the lower part to the ſnout be-
257 comes hooked. This ſpecies of fiſh[1] ſwims along with the gorbuſhe, and is caught with it in the ſame net, which is wove of ſmall yarn, the meſhes being about an inch wide. Such as live in the rivers are nouriſhed by the roes of other fiſh; and in the ſummer are found near the heads of ſmall rivers, which they leave in the ſpring. Such as are caught at the beginning of ſummer are ſalted, but thoſe caught later are frozen for the winter.

136 Another ſpecies of fiſh is called muikiſi, and is about the bigneſs of the narka; its ſcales are pretty large; its head is of a middling ſize; the upper part of its ſnout is like that of the goltſa, with the lower part hooked; it has teeth in its jaws and on the ſide of the tongue; its back is blackiſh, marked with round, or ſemicircular black ſpots; and upon each ſide has a large red ſtripe, which goes quite from the head to the tail: this diſtinguiſhes it from all the other ſpecies of this fiſh: it ſwallows all kinds of naſtineſs, and often catches the field mice that happen to ſwim upon the river; and is ſo particularly fond of the nortleberry, that if it ſees any growing upon the bank, it throws itſelf out, and ſeizes either the berry or the leaf of the plant. It is a well taſted fiſh, but is not caught in ſuch plenty as others are. They do not certainly know the time of its entering the rivers, but imagine it is before the ice is gone.

There is a third kind called kunſha, which is about three feet long; the head makes a ſeventh part of the length; the ſnout is ſhort and ſharp; its jaws are furniſhed with teeth; its back and ſides blackiſh, marked with yellow ſpots, ſome of which are round and others oblong; its belly is white; its lower fins and tail blue; and the fleſh white and well taſted. In *Ochotſka* it ſwims in ſhoals, but at *Kamtſchatka* it is more rare, and conſequently more eſteemed.

1. [Goltza]

The

The fourth ſpecies is the harius, which is well known in *Siberia* and all *Ruſſia*; but thoſe that are here have the back fin longer than the others. Mr. *Steller* writes, that they come up into the rivers upon the firſt going off of the ice; but I never happened to ſee this fiſh in *Kamtſchatka*. 136

There is another ſpecies of red fiſh which reſembles the golſta, with this difference, that its head is larger, and the upper part of the ſnout a little hooked; its ſides are marked with red ſpots, like the malma: it is ſeldom longer than 20 inches.

Among the ſmall fiſhes which the *Kamtſchadales* feed upon are three ſpecies of ſmelts; one of which is called hagatch, the ſecond innaka, and the third uiki. The hagatch is our common ſmelt. The innaka differs from it a little, and is found in great plenty about the lake *Nerpech*. Uiki is thrown ſometimes upon the ſhore in vaſt heaps for 100 verſts together. They are eaſily diſtinguiſhed from the other ſpecies by a rough ſtripe that goes down the ſide. They commonly ſwim three together, and are ſo joined by the afore-mentioned rough ſtripe, that when you catch one the others cannot eaſily diſengage themſelves. The *Kamtſchadales* dry this fiſh as food for their dogs; but in caſe of ſcarcity they uſe it themſelves, although the taſte is very diſagreeable 136 231 262

The laſt kind of fiſh which we ſhall mention is the herring: theſe are found in great plenty in the Eaſtern Sea, but very ſeldom in the bays which lie upon the *Penſchinſka*. In my opinion they don't differ in the leaſt from the herring which we have in Europe; which Mr. *Steller* likewiſe confirms. In the harveſt they are found in large lakes, where they breed and winter: in the ſpring they ſwim towards the ſea. The greateſt fiſhery of them is in the lake *Viliutchin*, which is only about fifty fathom from the ſea, and has communication with it by a ſmall outlet. When theſe herrings enter the lake, this paſſage is ſhut up by the ſand being thrown into it, and remains ſo 'till the month of 136 226

March,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 *March*, when it is wafhed away again by the high water arifing
226 from the melting of the fnow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themfelves whether the paffage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtfchadales* obferving this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fifhery continues fo long as the ice remains upon the lake. They catch them likewife with nets in the fummer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fifh; and fend it from the lower *Kamtfchatkoy* fort (where the greateft quantity is made) as a rare prefent, to the other forts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make lefs ufe of them than of roots and fifhes: the reafon of this is, that they don't well know how to
433 catch them; and their fifhery is fo advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the hufbandman to leave his plough and go a fhooting.

136 I fhall here divide the birds into three claffes: the firft, fea fowls; the fecond, the frefh-water fowls; and the third, thofe which frequent the woods and fields.

CLASS

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnbye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saltcries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

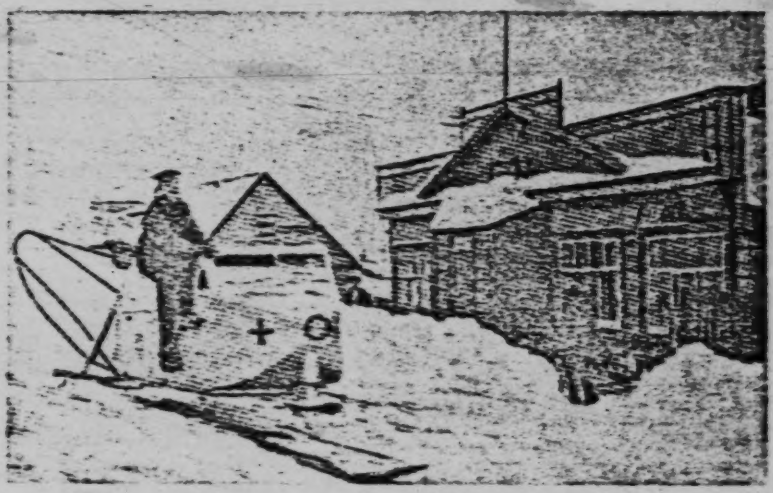
Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3



Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
[493] ever, the milk yield was very low, and livestock mortality was high.

175 From the Russians, the Itel'mens obtained improved means of pro-
179 duction: firearms, nets, etc. Stone and bone implements were completely
648 abandoned in favor of metal ones. Russian clothing and utensils began to come into use. The primitive semidugout was gradually (and by the beginning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Itel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Itel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
231 spawning runs caused almost annual failures of the native catch and led to inevitable famines.

Contemporary Life of the Itel'mens

175 During the civil war in the Far East, the Itel'mens actively helped the
648 guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets*, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 * Their nets are made of pack thread, like ours; they
314 purchaſe it of the Ruſſians: there is another kind however,
439 which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

T:Lesseps T-3 (1787-88)1790 Kamchada

226 by closing up the river with stakes and branches of trees, so as to leave only a narrow passage for the fish, or sometimes several, where they place baskets, so constructed that, if the fish once enter, it is impossible for them to retreat.

231 Horses are very scarce in Kamtschatka.
492 I saw some at Bolcheretsk belonging to government, and intrusted to the care of the Cossacs. They merely serve during summer for the carriage of merchandize and other effects of the crown, and for the convenience of travellers.

Dogs however abound in this country, and are so serviceable to the Kamtschadales as to render the privation of the other domestic animals less felt by them. They serve all the purposes of carriage, and are fed without difficulty or expence, their food consisting entirely of the offals, or such decayed

7:Lesseps T-3 (1787-88)1790 Kamchadal

TOWARDS THE END OF NOVEMBER THE COLD
132 became on a ſudden ſo ſevere, that in a few
166 days the rivers were all frozen, even the Bol-
226 chaïa-reka, which ſeldom happens, becauſe of the extreme rapidity of its current. The next day it got rid of the ice that covered it, and from that time I ſaw no more ſtop before Bolcheretſk, lower than the houſe of the governor. Though frozen in various places, it preſents a great number chaſms, where the water is ſeen to flow as uſual.

On each ſhore of the peninſula, there is a ſenſible difference in the atmoſphere. During the fine weather, a drought prevailed at Saint Peter and Saint Paul's, whereas at Bolcheretſk they complained of frequent ſhowers; meanwhile autumn had not proved this year more rainy than common. Very heavy rains are injurious in this country, becauſe they occaſion floods, which drive the fiſh from the rivers; a famine moſt diſtreſſing to the poor Kamt-

7:Lesseps T-3 (1787-88)1790 Kamchadal

132 166 226 ſchadales is the reſult, as it happened laſt year: in all the villages along the weſtern coaſt of the peninſula. This dreadful calamity occurs ſo frequently in this quarter, that the inhabitants are obliged to abandon their dwellings, and repair with their families to the borders of the Kamtſchatka, where they hope to find better reſources, 000 fiſh being more plentiful in this river. M. Kaſloff had intended to proceed along the weſtern coaſt, having already made his viſit through the eaſt; but the news of this famine determined him, contrary to his wiſhes, to return, rather than be driven to the neceſſity of ſtopping half way, or periſhing with hunger from the difficulty of procuring dogs and proviſion.

132 The wind varied conſiderably during my reſidence at Bolcheretſk; it was moſt commonly weſt, north-weſt, or north-eaſt; it blew ſometimes from the ſouth, but ſeldom

from

22: Guillemard T-2 (1882) 1886 Kamchadal

every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared
251 to be teeming with salmon. Stari-ostrog, situated on the right bank, consists of ten huts and a large number of fish-drying sheds.
262 The long Kamschatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226 251 In company with our English-speaking friend we went to inspect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133 137 It was late in the afternoon before we were again *en route*, our course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usual

[Avacha--Analyst]

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132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 361 We reached Narchiki early in the afternoon, and were greeted by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 136 226 Narchiki is placed on a little branch of the Avatcha River, which is here not more than eighteen inches deep. Standing upon its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our 136 horses nearly stepped upon them. Their back fins were visible as 226 far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

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could have pulled these latter out of the water with the gaff until we were tired.

While we were engaged in procuring our supper by this simple method, a native came down and watched our proceedings. Taking a spear he went a little way up stream, and soon returned with half a dozen fish which were a great improvement upon our own selection,—for I can apply no better term to it. They were of three species:—one a long charr-like fish, of a brilliant salmon-colour beneath, but with the back dark green, and with a most peculiar lower jaw. This closes into a sort of groove or socket in front of the upper jaw, producing a very extraordinary under-hung appearance. Its native name is Gultsi.[1] The other fish were a grayling (*Thymallus*) somewhat like our own, but not so deep; and a species of trout with obsolete spots.

The vast quantities of salmon which fill the rivers of Kamschatka in the manner I have described cease in course of time to astonish the traveller, who goes down to hook his supper out of the stream as naturally as he gathers the firewood to boil his kettle. But to a new-comer the sight is an astounding one. The millions of fish that are caught, and form the food throughout the year of almost every living creature in the country, are, however, as nothing compared with the countless myriads that perish naturally. I had at first supposed that the rotting fish that lined the banks, and here and there lay piled in little heaps together, were the victims of some unexpected and fatal epidemic. But I soon learnt that there was nothing unusual in it, and that it was an annual phenomenon of as constant occurrence as the breaking up of the ice.

000 We entered one of the huts in order to eat our lunch and rest the horses before proceeding on our journey. It was combined with the stable, through which one had to pass before entering the only habitable room. This was tolerably clean, and boasted of a couple of chairs and a table; but we had already got beyond the region of glass, and the windows were made of strips of bear-gut

[1] *Salmo callaris*, Pall.

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136 August; but each has its own time of arrival, which, from its constancy, appears to be more or less independent of seasonal influences. A few fish apparently remain at or about the river mouths during the summer, and eventually return to the sea, but these are so few as to be scarcely worthy of mention. The vast majority—practically all, in fact—ascend the streams to spawn, and, having once done so, die. In the case of some species every fish appears to perish; in others, to which I shall refer, a few get back to the sea.

The kelts of these salmon exhibit, though in a far more intensified degree, the changes that are noticeable in our own salmon after spawning. The jaws are prolonged and hooked, and the teeth much developed. The back becomes somewhat humped—in one species enormously so—and the skin of that region so hypertrophied and spongy as to conceal the scales. Simultaneously the colour of the body surface changes, becoming livid or dusky, and blotched with red patches, or even entirely red. The flesh gets paler in colour and tasteless, and the whole aspect of the fish denotes its unfitness for food. As they ascend the river the salmon keep close together in large shoals, each fish keeping to the shoal of its own species and not mingling with others. Later in the year, after spawning-time, they of course become indiscriminately mixed.

136 226 825 During our visit to, and journey through the country, we met with at least six different species of the Salmonidæ in abundance. That there were others I am quite sure, but in the following list I have limited myself to noticing those only about which we personally obtained information:—

1. *Oncorhynchus orientalis* (Pall.)—Known to the Kamschatkans as the Tchervitchi, this fish is the king of the Salmonidæ both as regards size and flavour. On first arrival the Tchervitchi is silvery, the back and upper surface dark, and marked with dark spots, which also extend on to the dorsal fin and tail. The fish may have a length of four feet or more, and are rather broad: their extreme

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weight was given by Afanasi as "over two poods," which would be 72 lbs. We did not see any fish of this size, but a salmon, most probably of this species, was caught by the *Dido's* men in 1855, the weight of which is given by Tronson as 76 lbs. There is no doubt that they commonly run to as much as fifty or sixty pounds. The Tchervitchi is proper to the Kamschatka and Okhotsk Seas, apparently not being found elsewhere. According to Steller, it only frequents the larger rivers, and does not exist to the north of the 56th parallel. He gives the date of its arrival as April 20th for the Kamschatka River, May 10th for the Bolchaia-reka, and June for the rivers in Avatcha Bay. According to Afanasi, it comes up the Kamschatka River "early in May," and gets out of season in July. It certainly appears, as far as we could learn from the natives, to wait for some days at the mouths of the rivers before ascending them, which it does in shoals so large that, as Pallas tells us,[1] a little wave of water is driven up in front of them.

We did not meet with the Tchervitchi until we got to the Kamschatka River in early September. The inhabitants had then long since ceased catching them, and very few remained in the river. The balagans and drying sheds were, however, full of them, and many seemed not to have been in quite clean condition at the time of catching. As a kelt, the fish becomes marked with red on the sides, producing a streaked appearance, and the rostrum becomes hooked, especially in the male, though apparently not nearly to the same extent as in the Garbusa and other species. From the time of entering the river the Tchervitchi is said by Pallas never to feed. We made no inquiries of the people as to this point, but they told us that a certain, though very small proportion of this species do not die, but manage eventually to regain the sea. The flesh is of a rather pale red in colour, and is esteemed by the natives above that of any other fish.

2. *Oncorhynchus lycaodon* (Pall.)—This salmon is known to

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 368.

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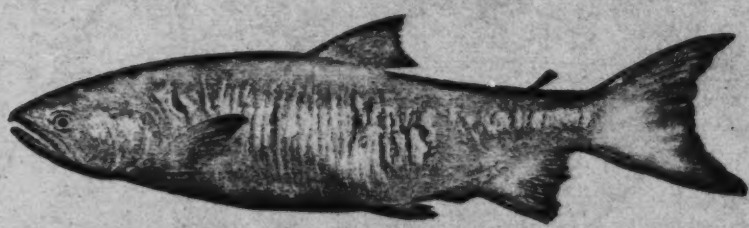
Kamschatkans[1] as the Krasnaya riba or red fish, but the name is invariably shortened to Krasna. In shape and general appearance it resembles our own salmon. On its first appearance in the rivers it is silvery, the belly white, the back dark with a bluish shade and almost without spots. In length it reaches three feet or more, and large examples would, I should think, scale over thirty pounds. It is found in the Okhotsk and Kamschatkan seas, and extends across to the American coast.[2] In the peninsula it seems to frequent large and small rivers alike, ascending the streams about the end of May or beginning of June, later than the Tchervitchi, but before



KELT OF HAIKO. (*Oncorhynchus lagocephalus.*)

the Haiko and Garbusa. Towards the end of August the Krasna is completely out of condition. It becomes a bright red all over like a gold fish, and both jaws get prolonged and hooked, while at the same time the teeth are wonderfully enlarged. None of the fish ever reach the sea after spawning—at least so we were informed by the natives;—and as this species is one of the most plentiful of all the Kamschatkan salmon, their bodies strew the banks in nearly as great numbers as the Garbusa.

3. *Oncorhynchus lagocephalus* (Pall.)—The trivial name of this fish is given by Steller[3] as Kaiko, but we found it invariably known as the Haiko. It is not unlike the preceding species (*O. lycaodon*),

[1] I have here and elsewhere used this term comprehensively as "an inhabitant of Kamschatka." It should not be confounded with Kamschatdale—the name applied to one of the original races inhabiting the peninsula

[2] Steller, "Beschreibung von dem Lande Kamtschatka."

[3] *Op. cit.* p. 157.

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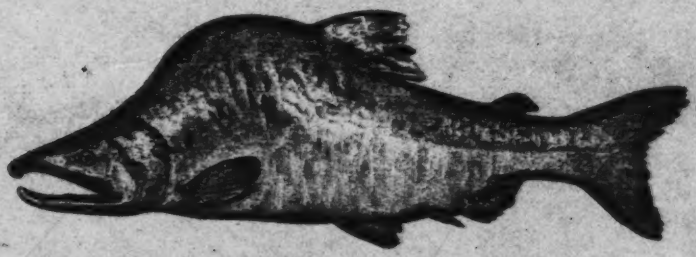
the back being dark greenish, the sides silvery, and the belly white, but it differs in the greater bluntness of the rostrum and the pale colour of the flesh. It appears, as a rule, to run smaller than the Krasna: its area of distribution is said to be similar. It arrives at the mouth of the Kamschatkan rivers some little time after the Krasna and Tchervitchi, but its advent coincides more or less with the Garbusa or Hump-backed Salmon. About mid-July[1] this species ascends the streams, and is caught in great numbers. Later, the kelts show much the same changes as those of the Krasna, the jaws becoming much hooked; but they never acquire the deep and



KELT OF GARBUSA. (*Oncorhynchus proteus.*)

generally-diffused red of the latter species, that colour being usually confined to small patches on the belly and under surface. A species of bread is said by Kittlitz and others to be made of the Haiko, but we did not see it.

4. *Oncorhynchus proteus* (Pall.) is known to the inhabitants of the country as the Garbusa or Hump-back. On arrival from the sea this fish is said to be without any trace of the extraordinary development of the back from which it takes its name. It is without spots, except upon the tail—which is deeply forked—and is very silvery. It is said to frequent the rivers of the Okhotsk Sea and those of some of the Aleutian Islands, as well as Kamschatka. Roughly speaking, its length is from eighteen to twenty-four inches,

[1] I have also got "mid-June" in my notes, but I think the date given above is probably the correct one.

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and its weight seldom above fifteen pounds. As a rule it is considerably less.

The Garbusa swims up the rivers in company with the Haiko, and is the most abundant of all the Salmonidæ in Kamschatka. According to Pallas, the hump begins to appear even before the fish has spawned, and is generally supposed by the natives to result from the efforts made in ascending the stream! Its enormous development in the kelts can best be realised by reference to the annexed illustration. Both jaws become hooked at the same time, more so, perhaps, than in any other species, and in consequence, in an old kipper the mouth does not nearly close. Until the death of the fish the gibbosity increases, and the colour of the body-surface becomes more and more livid and brown, the sides and under part being irregularly blotched with blood-red. The vast majority of this species die in the month of August, and though some few live till the middle of September, the natives told us that none return to the sea. The flavour of the flesh is said to be very good when the fish first come up the river, but the Garbusa is looked upon almost as the dogs' private property, and is not much eaten by the natives. In the balagans and drying sheds it invariably occupies the lowest tier of all. The female fish is described by Pallas as much smaller than the male, and very much less numerous; the hump does not become so largely developed and the mandibular hooks are absent or slight. We did not, however, meet with many individuals agreeing with this description.

5. *Oncorhynchus sanguinolentus* (Pall.) is the Kisutchi of the Kamschatkans. The clean fish is silvery, and devoid of red colouration, despite its specific name. The dark greenish-brown back is marked with rather large black spots, and the snout is blunt, becoming afterwards developed in a most peculiar manner. Pallas says that the largest measure three feet and weigh from ten to twelve pounds,[1] but it is evident that a fish of this length would weigh considerably more. Most of those that we saw towards the

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 379.

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lower part of the Kamschatka averaged, I should think, about twelve or fifteen pounds; the extreme weights, at a rough guess, being eight and twenty-five pounds.

The Kisutchi is the last of all the salmon to ascend the rivers. It arrives about the 10th or 12th of August, and in consequence is in good condition when most of the other species are uneatable. In the middle of September we found the majority of them clean fish, and it is not till the following month that they usually acquire the blood-stained tinge of the under surface, and the extraordinary snout to which I have just alluded. The latter presents a smoothly rounded protrusion about as large as a sixpence, over-hanging the lower jaw, and giving the fish a very comical expression. We learnt from our two hunters that the Kisutchi were caught until November, and Krasheninikov tells us[1] that they are found "during the whole winter in those springs that run into the Kamschatka from the south," which is possibly due to the fact that the water of some of these streams is warm. It appears to be a generally-distributed species, occurring in all the rivers of the peninsula. The flesh is very pale, almost white.

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6. *Salmo callaris* (Pall.) is the Goletz or Gultsi of the natives. Krasheninikov says[2] that "the largest fish of this species, which lives sometimes five or six years, comes from the sea into the River Kamschatka, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almost as big as the *Chavitsi* (Tchervitchi), though it seldom weighs more than twenty pounds. They are found likewise very large in the Bistroy River; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour,[3] have large teeth, and the lower jaw is crooked with a knob: it seems indeed of a different species. Those of three years old, which have been one year out of the sea, have a long head, are of a silver colour, with small scales, and

[1] "The History of Kamschatka," p. 148.
[2] *Op. cit.* p. 149.
[3] Steller also says, "auf dem Bauch und Flossen Zinnober-roth."

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small red spots; and such as have been two years out of the sea are round and longish, with small heads; and their flesh, which is reddish white, is hard and well tasted. With regard to their size, the first year they are long and small; the second they grow more in breadth than in length; the third the head grows considerably; and the fourth, fifth, and sixth years their breadth and thickness increases greatly: in the fourth year also the lower part to the snout becomes hooked."

Pallas adds that "these fish enter the rivers from the Eastern ocean in great numbers . . . in order to hybernate, being still without spots. They are said to remain torpid during the winter in the

GULEKI (*Salmo callaris.*)

depths of rivers, in shoals of thousands, until at the return of spring they seek the sea again, from about the 10th to the 20th of May. They surmount cataracts of whatever height by leaping, and in the same manner escape from nets one fathom deep. They force their way into the Kuril-Lake near the River Kamschatka,[1] notwithstanding a very high cataract, and hybernate in it in large numbers. Many remain for a long time in the rivers and lakes, but the greater number return in spring to the sea. When they come up from the sea they are without the red tint and spots, and shine with a silvery lustre; during the ascent they become gradually spotted with red, while they acquire a more or less red tint beneath the belly and on the fins, according to the comparative rapidity of the river currents."

Both the above accounts are very difficult to reconcile with that

[1] It is difficult to understand what lake is here meant. The Kuril Lake is at least 170 miles distant from the nearest point of the Kamschatka River.

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114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

22: Guillemard T-2 (1882) 1886 Kamchadal

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 The natives are prevented by law from barring the river in the
252 lower part of its course, and here the salmon are taken chiefly with
262 seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 The low and muddy shores of the river in this part of its
224 course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

24: Lansdell-638 [2] M-2 (1879) 1882 Kamchadal
116, 133, 161, 226, 361

" The number of the Kamchatdales, strictly so called, is estimated at 3,000. Their capital is Petropavlovsk, the only town on the eastern coast of the peninsula. (1)

1. It is situated on the right shore of the splendid Bay of Avatcha, which may claim with Rio Janeiro and San Francisco to be one of the finest harbours in the world. It is perfectly protected from the winds, and, transplanted to a more favourable position, it might be one of the greatest of markets; but since the fishery of the whale in the surrounding seas has lost its importance, Petropavlovsk has sunk from a place of 1,000 inhabitants to one of 500. Mr. Dobell, who lived in the peninsula five years, says that he found there many dykes and mounds, from the existence of which he argues that the country was once thickly populated."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts, at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

27: Sauer--298 [2] T-2 (1789-93) 1802 Kamchadal
116, 136, 226

"The fish of the bay of Avatsha are, cod all the year through; thornbacks, flounders, and halibuts, as soon as the ice begins to break; whitings are caught all the winter by the boys and girls, who make a hole in the ice, lie flat upon it, and look into the water, holding in it a horse-hair noose on the end of a stick, which they get round the fish, and by these means haul them up very fast. Herrings and smelts are the first passage fish that appear (the former in immense shoals towards the latter end of April), and they remain till the beginning of June: their numbers, indeed, are incredible."

29:Cochrane T-2 (1821-22)1824 Kamchadal

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 and the *Opalsky* lake: they are caught likewise during the whole
226 winter in those springs that run into the *Kamtschatka* from the south; and near to where the old lower fort of *Kamtschatka* stood they also abound, which is a great relief to the inhabitants. I myself was at this fishery in the end of *February*; however I found the fish at that time dryer and not so well tasted as in the harvest. This fish eats very well, either salted, dryed, or smoaked. It is caught frequently in the same net with the keta
227 and narka; and those which they use for this fishery are made of yarn about half as thick as that with which they make the nets for the chavitsi, and the meshes are about an inch and a half wide.

136 All these different species of fish change their colours, turn lean and ugly, their snout bends, their teeth grow, and a scurf appears upon their skins. The chavitsi, narka, and white fish, change their silver colour to a red; the keta turns likewise red, stained with black stripes. Their fins and tails become reddish and blackish; in one word, they would never be taken for the same fish that enter the rivers, if these changes were not certain. The gorbushe alone preserves its silver colour, and, whenever it loses that, it dies.

It is incredible with what eargerness they go up the rivers, particularly the gorbushe. When they come to any place where the stream is strong, and those that are weak find it impossible by their own strength to get up, they fasten their teeth upon the tail of some that are stronger, that they may be drawn up by them; so that several of these fish are found which have their tails bitten.

The true salmon may always be reckoned one of those fish that come in shoals; and are found to go up the rivers *Kampakfve*, *Bircumkin*, and *Etchi*. I never saw these fish indeed, but have heard a great deal of them. Mr. *Steller* writes, that when

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
● 228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
563 eight winter months, but the summer was very busy. Scores of laborers were
brought on the company's steamers from the Amur River. Not all the necessary
228 structures were ready at that time, and the imported laborers slept under the
464 cover of primitive shades. Mountains of salt lay in the open, melting from rains.
A part of the laborers were busy preparing a kind of caviar from the roe of

63

228 salmon. After taking out the roe they threw overboard the split fish, causing
an enormous waste of food-material. The laborers in the saltery and cannery
threw out from their seines all other fish than salmon, and from the latter the
hump-back salmon, which was not in favor with the foreman of the plant.

182 From information gathered before my trip to the lake I knew that there were
several pits of ancient dwellings (see the map of the Kuril Lake). The natives
000 have either died out or were exterminated by the Russian conquerors. My party

is only the richer sort of people that use this brandy; and what 273
they sell is only the first running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the first 231
running, and the pood costs four rubles or more. The herbs 273
that remain in the still after drawing off all the spirit, are made use of as a yest, instead of berries, to ferment other infusions or wort; and what they cannot use thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy distilled from the plants from which the skin has not been clean scraped, it causes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1st, that it is very piercing, and contains a good deal of a sharp acid, which coagulates the blood and makes it black: 2dly, that a small quantity of it makes people drunk and quite senseless, and causes their faces to turn black: 3dly, that if a person drinks a few drams of it, he is plagued the whole night with disagreeable dreams, and next day is uneasy and disturbed as if terrified with the apprehension of the greatest misfortune: and, what is very extraordinary, he has seen some people the day after they have been drunk with this spirit, from one draught of cold water, become again so drunk that they could not stand upon their feet. They wet their hair 751
with the juice, which they squeeze out of this herb in the 824
spring, as a preservative against lice, and find it to be their only 842
relief. Many of the *Kamtschadales*, who desire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Asia*, 137
has the third place in the food of the *Kamtschadales*. They 262

* Vedro is a *Russian* liquid measure containing 25 pints.

† Epilobium. Linn. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.

boil

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 merous that travellers muſt wait two hours before they paſs. They return commonly to *Kamtſchatka* about the month of *October*. It is ſurpriſing that ſuch ſmall animals, in one ſummer, can paſs over ſuch an immenſe tract of land; and one cannot but admire the order and regularity which they obſerve in their march, as well as the foreknowledge they have of the change of weather.

825 Some of the inhabitants aſſured me, that when they go out of their neſts they cover their proviſions with poiſonous herbs, to deſtroy other rats that may come to rob their ſtore; and that, if all their winter proviſion is taken away, and nothing left that they can eat, in the ſtead of their own ſtores, they ſtrangle themſelves for vexation, ſqueezing their necks between the forked branches of ſhrubs: for which reaſon the *Kamtſchadales* never take away all their ſtore, and even pay for what they take by putting in either dried caviar, or ſomething that will ſerve the poor creatures for ſuſtenance. Although all theſe circumſtances are related by the moſt ſerious of the *Kamtſchadales*, yet we muſt not implicitly rely on their authority, before the facts are better enquired into.

231 The dogs of *Kamtſchatka* are extreamly like the common village dogs, and are white, black, ſpotted white and black, or grey like the wolves; brown or other colours being very rare. They are eſteemed ſwifter and longer-lived than any other dogs; and this may be attributed to their light ſimple food, which is fiſh. In the ſpring, every one lets his dogs run at liberty, without taking any care about them; for they can be uſed for travelling only while the ſnow is on the ground. They then feed upon what they can get in the fields, where they dig for the mice; and in the rivers they, as well as the bears, catch fiſh. In the month of *October* the *Kamtſchadales* call them home, and tie them up near their huts, 'till they loſe a good deal of their fat, that they may be lighter for the road, and then one

bears

hears their continual howling night and day. In the winter they are fed with opana and fish-bones, which are laid up for them in summer. The opana is thus prepared :—As much water as they think their dogs want they pour into a large trough, and then throw in some ladlefuls of sour or rather rotten fish, which is prepared in pits for this purpose, adding to this some fish-bones, and heating the whole with glowing stones until the fish and bones be boiled. This opana is reckoned the best and most agreeable food for the dogs, and they feed them with it only at night, which makes them sleep well; but never give them any in the day when they design to travel, because it would make them heavy and lazy: though they be never so hungry they will not touch bread; but rather than that, eat their own bridles, reins, or harness, if they can get at them. However fond they may be of their master, yet, if he happens to fall out of his sledge, and lose his hold of it, they run away without regarding him; and he must walk on foot until the sledge be overturned, or catched and stopped by something or other; and therefore he ought to be careful never to lose his hold, but rather submit to be dragged upon his belly until the dogs tire. Besides, upon any steep descent, especially the banks of rivers, one half of them must be unyoked, otherwise they are not to be managed; for those that appear quite tired shew an uncommon vigour in such places, and the more dangerous the descent is the more strength they exert. They are in like manner unruly if they find the scent of the deer, or hear the howling of other dogs in the villages near at hand. But for all this, the dogs are, and always will be, absolutely necessary in *Kamtschatka*, even although there should be plenty of horses; for they could seldom be used in winter on account of the great depth of snow, and the frequency of hills and rivers; and in summer, the bogs are so frequent, that some places are impassable even for men. Besides dogs have this advantage over horses; that in

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

231 in the greateſt ſtorm, when a man cannot ſee the path, nor even
492 keep his eyes open, they very ſeldom miſs their way; and if
825 they ſhould, they go from one ſide to the other, 'till by the
237 ſmell they find it again: and when it is abſolutely impoſſible to
787 travel at all, which often happens, then the dogs lying round their maſter defend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231 Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

CHAP.

136 brings forth its young alive, like the whale; and when its mouth is ſhut has ſome reſemblance of a ſturgeon, but its teeth are very different, being large and terrible. The *Kamtſ-*
262 *chadales* eat the fleſh of this fiſh, and though it appears to
825 be tough and ſtrong, they ſay it is exceedingly well taſted. The guts, and particularly the bladder, are in high eſteem; ſo that when they catch this fiſh, they never call it by its name, for fear, as they imagine, they ſhould provoke it to burſt its bladder, and render it uſeleſs to them. The teeth are ſold under the name of ſerpents' teeth.

136 Several fiſhes which are common to other ſeas are found here;
262 as pike, eels, lampreys, cod, and very fine ſoals in great plenty;
231 but the inhabitants make no account of theſe fiſh, and never uſe them unleſs in great neceſſity, or to feed their dogs. Mr. *Steller* obſerved four different ſpecies of flat fiſh.

There is a fiſh called * vahnae, which is a ſpecies of the cod; is round and thick, with three fins upon its back; and when taken out of the water is of a copper-colour, but preſently changes to yellow: its fleſh is white, but ſoft, and of a diſagreeable taſte; however the inhabitants eat more of it, than of other fiſh which are much better taſted; the reaſon indeed is, that they catch this fiſh in the beginning of the ſpring, when they can catch no other; a great deal of which they dry in the ſun uncleaned, deſigning it as proviſion for their dogs.

136 I ſaw the fiſh which they call † terpuk, but it being dry, I could not obſerve thoſe fine colours which Mr. *Steller* deſcribes. By his deſcription its back is blackiſh, its ſides are reddiſh, and chequered with fine ſilver-coloured ſpots; ſome of which are ſquare, and others circular: in its ſhape it reſembles the perch.

1. [mokoe or Canis Carcharius Autorus]

* Onos vel Aſinus Antiquorum.

† Doecogrammos Stelleri.

They

The third kind of this fish is called keta or kacko; which is somewhat larger than the narka. The flesh is white; the head flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *eukol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas. 136 262

The gorbushe, or crook back, follows or sometimes accompanies the keta. This fish is more plentiful than any other whatever; it is about eighteen inches long, and flattish; its flesh is white; its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs. 136 262 231

The last of these kinds that come on shore is called white fish. This fish both in bulk and appearance is very like the keta; they differ in this indeed, that the keta has no spots, and the white fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have spawned, they take all care to provide for their own safety, retiring immediately to deep places where there are warm springs; and they are chiefly found in the springs near the *Bolscheretskoi* river 136 825 226 136 226

 and

The fourth ſpecies is the harius, which is well known in *Siberia* and all *Ruſſia*; but thoſe that are here have the back fin longer than the others. Mr. *Steller* writes, that they come up into the rivers upon the firſt going off of the ice; but I never happened to ſee this fiſh in *Kamtſchatka*. 136

There is another ſpecies of red fiſh which reſembles the golſta, with this difference, that its head is larger, and the upper part of the ſnout a little hooked; its ſides are marked with red ſpots, like the malma: it is ſeldom longer than 20 inches.

Among the ſmall fiſhes which the *Kamtſchadales* feed upon are three ſpecies of ſmelts; one of which is called hagatch, the ſecond innaka, and the third uiki. The hagatch is our common ſmelt. The innaka differs from it a little, and is found in great plenty about the lake *Nerpech*. Uiki is thrown ſometimes upon the ſhore in vaſt heaps for 100 verſts together. They are eaſily diſtinguiſhed from the other ſpecies by a rough ſtripe that goes down the ſide. They commonly ſwim three together, and are ſo joined by the afore-mentioned rough ſtripe, that when you catch one the others cannot eaſily diſengage themſelves. The *Kamtſchadales* dry this fiſh as food for their dogs; but in caſe of ſcarcity they uſe it themſelves, although the taſte is very diſagreeable 136 231 262

The laſt kind of fiſh which we ſhall mention is the herring: theſe are found in great plenty in the Eaſtern Sea, but very ſeldom in the bays which lie upon the *Penſchinſka*. In my opinion they don't differ in the leaſt from the herring which we have in Europe; which Mr. *Steller* likewiſe confirms. In the harveſt they are found in large lakes, where they breed and winter: in the ſpring they ſwim towards the ſea. The greateſt fiſhery of them is in the lake *Viliutchin*, which is only about fifty fathom from the ſea, and has communication with it by a ſmall outlet. When theſe herrings enter the lake, this paſſage is ſhut up by the ſand being thrown into it, and remains ſo 'till the month of 136 226

March,

CHAP. IX.

231 *The Method of* TRAVELLING *with* DOGS, *and the* FURNITURE *necessary thereto.*

THE Dogs of *Kamtschatka* differ very little from the common house dogs: they are of a middling size, of various colours, though there seem to be more white, 492 black, and grey, than of any other. In travelling they make use of those that are gelded, and generally yoke four to a sledge.

The alaki is made of broad double soft straps, which are put over the dogs' shoulders, the near dog having it over his left, and the off dog over his right. At the end of these alaki's is a small thong, with a hook at the end of it, which is fastened to a ring in the fore part of the sledge.

The pobeshnick is a long strap, and serves instead of a coach pole. It passes through a ring, which is in the middle of the fore part of the sledge.; and to it is fastened a chain that keeps the dogs together, that they should not run asunder.

The bridle is a long strap, with a hook and chain, which is fixed to the fore dogs, and is much longer than the pobeshnick, being fastened to a ring in the fore part of the sledge.

The osheiniki, or collars, are broad straps made of bear-skin, and are frequently put upon dogs merely for ornament.

They drive and direct their dogs with a crooked stick about four feet long, which they call the ostal, and sometimes adorn it with different coloured thongs: this is looked upon as a great 493 piece of finery. They drive their sledges sitting upon the right side

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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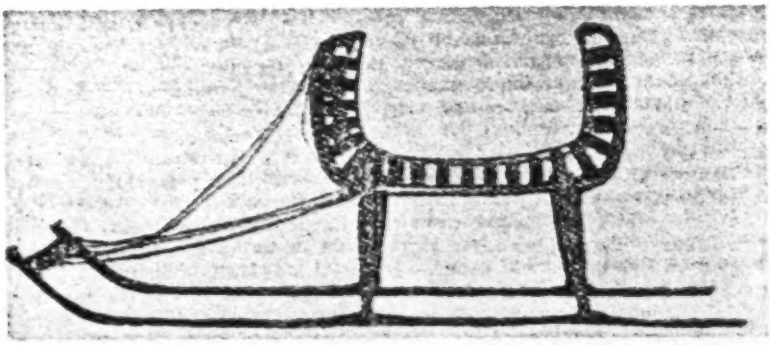


18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

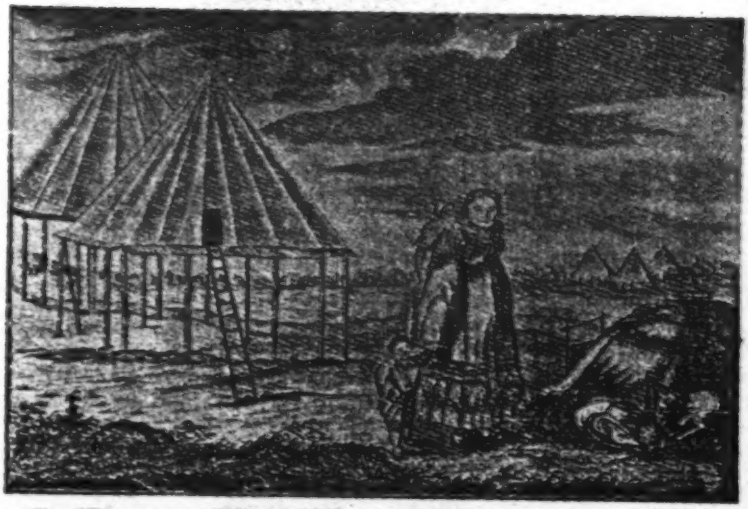
The Russians found among the Itel'mens a highly developed neolithic technology. "The former Kamchatka metals, almost until the coming of
[321] the Russians, were bone and stones. They were used in the making of axes,
[324] knives, spears, arrows, lancets and needles," Krasheninnikov writes about the Itel'mens. Rock crystal was also widely used for knives and tips.
[372] Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis,
[481] but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3



Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

361

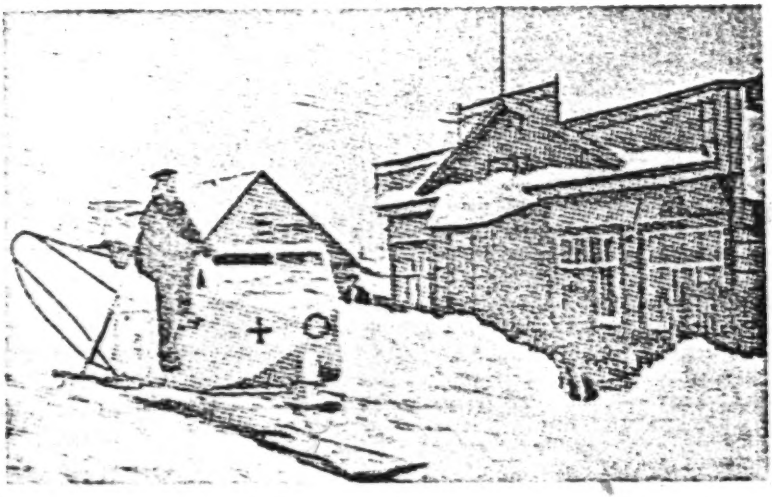
View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 433 622 648 178 614 476

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 792

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231



Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
[493] ever, the milk yield was very low, and livestock mortality was high.

From the Russians, the Itel'mens obtained improved means of pro-
175 duction: firearms, nets, etc. Stone and bone implements were completely
179 abandoned in favor of metal ones. Russian clothing and utensils began to
648 come into use. The primitive semidugout was gradually (and by the begin-
ning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Itel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Itel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
231 spawning runs caused almost annual failures of the native catch and led to inevitable famines.

Contemporary Life of the Itel'mens

175 During the civil war in the Far East, the Itel'mens actively helped the
648 guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

7:Lesseps T-3 (1787-88)1790 Kamchadal

251
231

have a place ſheltered from the heat of the ſun, and at the ſame time perfectly expoſed to the air. Under the collonnades or ruſtic porticos, which form the lower part of their balagans, they find this convenience; and there they hang their fiſh, either to the ceiling or to the ſides, that it may be out of the reach of the voracioufneſs of their dogs. The Kamtſchadales make uſe of dogs * to draw their ſledges; the beſt, that is the moſt vicious, have no other kennel than what the portico of the balagans affords them, to the poſts of which they are tied. Such are the advantages reſulting from the ſingular mode of conſtructing the balagans, or ſummer habitations of the Kamtſchadales.

Thoſe of winter are leſs ſingular; and if

* As I ſhall ſoon be obliged to adopt this mode of travelling, I ſhall defer my deſcription of the dogs till that period.

equally

7:Lesseps T-3 (1787-88)1790 Kamchada

226 by clofing up the river with ftakes and branches of trees, fo as to leave only a narrow paffage for the fifh, or fometimes feveral, where they place bafkets, fo conftructed that, if the fifh once enter, it is impoffible for them to retreat.

231 Horfes are very fcarce in Kamtfchatka.
492 I faw fome at Bolcheretfk belonging to government, and intrufted to the care of the Coffacs. They merely ferve during fummer for the carriage of merchandize and other effects of the crown, and for the convenience of travellers.

Dogs however abound in this country, and are fo ferviceable to the Kamtfchadales as to render the privation of the other domeftic animals lefs felt by them. They ferve all the purpofes of carriage, and are fed without difficulty or expence, their food confifting entirely of the offals, or fuch decayed

7:Lesseps T-3 (1787-88)1790 Kamchadal

231/492 fish as are rejected by their maſters; and even theſe are not allowed, unleſs when it is neceſſary. In ſummer, which is their ſeaſon of reſt, little care is taken of them; the dogs well know how to provide for themſelves, by ranging over the country and along the ſides of lakes and rivers; and the punctuality with which they return, is one of the moſt ſtriking proofs of the fidelity of theſe animals. When winter arrives, they dearly pay for the liberty and temporary repoſe they have enjoyed. Their labour and ſlavery begin anew, and theſe dogs muſt have extreme vigour to be able to ſupport them. Ma nwhile they are not remarkably large, and reſemble pretty exactly our mountain dogs, or ſuch as are commonly uſed by ſhepherds. There is not an individual inhabitant, Ruſſian or native, that has leſs than five. They make uſe of them when they travel, when they go to the foreſts to cut wood, and for the conveyance

7:Lesseps T-3 (1787-88)1790 Kamchadal

231/492 veyance of their effects and provisions, as well as their persons. In short, these dogs conduct travellers from place to place, and horses could not in reality be more serviceable. They are harnessed to a sledge two and two together*, with a single one before as a leader. This honour is bestowed on the most intelligent, or the best trained dog, and he understands wonderfully the terms used by the conductor to direct his course. The cry of *tagtag*, *tagtag*, turns him to the right, and *kougba*, *kougba*, to the left; the intelligent animal understands it

* They are castrated like horses, but the mode of performing the operation is different. The Kamtschadales do not extirpate the testicles, but bruise them, and the instrument they make use of is their teeth. Some of them do not survive, and others are crippled and unfit for service. In the mean time it is imagined that equal advantage could not be derived from these animals, if they were permitted to remain in their natural state; it would not be practicable to harness them with females. All the males, however, are not mutilated; a sufficient number is reserved for the preservation of the species, and these are frequently used for hunting.

7: Lesseps T-3 (1787-88)1790 Kamchadal

231 immediately, and gives to the reſt the ex-
492 ample of obedience: *ab*, *ab*, ſtops them, and
493 *ba* makes them ſet off. The number of dogs that it is neceſſary to harneſs, depends upon the load; when it is little more than the weight of the perſon who mounts the ſledge, it is conſidered as a common ſledge, or *ſaunka**, and the team conſiſts of four or five dogs. The harneſs† is made of leather. It paſſes under the neck, that is, upon the breaſt of theſe ſteeds, and is joined to the ſledge by a ſtrap three feet long, in the manner of a trace: the dogs are alſo faſtened together by couples paſſed through their collars; theſe collars are frequently covered with bear's ſkin, by way of ornament.

493 The form of the ſledge is like that of an

* The ſledges for baggage are called *narta*, and are drawn by ten dogs.

† Called *alaki*.

oblong

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 After a few bad nights, ſleep at laſt over-
powered me, and I was inſenſible to all
noiſe. By degrees I became ſo inured to
the cries of theſe animals, that I could re-
poſe in the midſt of them in perfect tran-
231 quillity. I ſhall mention in this place, that
the dogs are only fed once a day, at the end
of their journey; their repaſt conſiſts com-
monly of a dried ſalmon diſtributed to each
of them.

133 The oſtrog of Malkin is ſimilar to thoſe
361 which I have already deſcribed. It con-
tains five or ſix iſbas and a dozen balagans,
is ſituated upon the border of the Biſtraïa,
and ſurrounded with high mountains. I
had no time to viſit the hot ſprings that are
ſaid to be in this neighbourhood, the waters
of which are ſtrongly impregnated with
ſulphur; and one in particular, iſſuing from
the declivity of a hill, forms at the bottom a
baſon of tolerably clear water.

22: Guillemard T-2 (1882) 1886 Kamchadal

175 In the opinion of those who had been in Petropaulovsky at the time, the disaster was chiefly due to the division of the forces on landing,—one body getting ahead of, and being fired into by the other. The thickness of the bush prevented a recognition of this error, and the attacking party imagined themselves taken in rear. The Cossacks took advantage of the mistake, and before long the Allies were in a state of confusion which the nature of the ground rendered hopeless. More met their death by being driven over the precipice, it was said, than actually fell before the rifles of the Cossacks.

The victors were left in peace for the time being, but, in the spring of the following year, the Allied Squadron once more made its appearance. The *President*, *Pique*, *Dido*, *Brisk*, *Encounter*, and *Barracouta*, together with the French frigate *Alceste*, assembled off Kamschatka, and entered Avatcha Bay on the 31st May, 1855. They found the town completely deserted by the Russians. Three foreign residents alone remained, and from them they learned that the settlement had been evacuated by order of the Emperor upon the breaking up of the ice. Even the natives had fled. On the 7th June the batteries and magazines, which had been strengthened and increased in number since the engagement in the preceding year, were blown up, and two days later all the Government buildings were burnt to the ground. The latter proceeding was, in all probability, the wanton act of some English blue-jackets, and was done without the knowledge of our authorities. It was an unfortunate occurrence, the explanation of which could hardly be expected to be believed by the Russians, and the affair still rankles in the breast of the inhabitants of the little settlement.

A few days later the Squadron left, and the inhabitants returned to their homes. Poor little Petropaulovsky has to rest content on her honours of 1854, for the town has never been re-fortified, and is now no longer a military post.

231 One cannot be long in Kamschatka without making the
492 acquaintance of that very necessary animal, the sledge-dog. When

22: Guillemard T-2 (1882) 1886 Kamchadal

231 the fact is taken into consideration, that for every inhabitant of the
492 peninsula there are at least five or six of these animals, it will be understood that the effect produced is hardly inferior to that exhibited by the streets of Constantinople. "A dog's life" is a phrase which is here most appropriately realised. No comfortable homes are provided for them to enable them to withstand the rigours of the arctic climate, and the poor beast, except when actually at work, has in most cases to "find himself." Long experience, and the instinct transmitted to him by his ancestors, has, however, given him all the resources of an old campaigner. Stumbling at night about the uncertain paths of the settlements, the traveller is not unfrequently precipitated into the huge rabbit-burrows which the animal constructs to avoid the cutting winds. His coat, nearly as thick as that of a bear, is composed of fur rather than hair. As for his manners, they are, like those of the midshipman's savage, almost non-existent. He has thoroughly grasped the fact that self-preservation is the first law of Nature, and does not scruple to act upon it, in its widest meaning, upon every occasion. Wonderfully well-trained, cunning, and enduring, he is at the same time often obstinate and unmanageable to a degree, and is apparently indifferent to the kicks and blows so liberally showered upon him by his master. Excepting in settlements where neighbouring stretches of *tûndra* render the use of sledges possible in summer, he has a long holiday during that season. During this time he wanders over the country at will, sometimes returning at night to his burrow, at others being absent for days together. A good hunter and fisherman, he supports himself upon the game and salmon he catches, and it is but rarely that he deserts his master for good. But the inhabitants have to pay a good price for
231 his services. Owing to his rapacity, it is impossible to keep sheep,
136 goats, or any of the smaller domestic animals, and Kamschatka is one of the few countries in the world in which fowls are unknown.[1]

[1] In Petropaulovsky this loss is partially made up for by large quantities of sea-birds' eggs brought from Okhotsk, and the islands at the mouth of Avatcha Bay.

22: Guillemard T-2 (1882) 1886 Kamchadal

231 136 *Rien n'est sacré pour un sapeur.* Raw hides, boots, and even babies, it is said, occasionally vary his diet!

To our ship's crew Petropaulovsky appeared little less than a paradise. The bright sunny weather and clear cold nights were a pleasant change after the heat of the tropics, and the forecastle mess was furnished with many unaccustomed delicacies. The 136 harbour and rivers teemed with fish; periwinkles *à discretion* were 137 to be had for the picking, and milk and bilberries were abundant. The whiting and herrings were, however, left in comparative peace, owing to the ease with which salmon were to be obtained at the mouths of the Avatcha and Paraminka rivers. On one occasion no less than three hundred of these fish were obtained at one haul of the seine, and the crew occupied themselves in salting, smoking, 000 and otherwise preserving the spoil. Jack was in his element, and doubtless would not have objected to passing the rest of his life in such a fascinating spot. Our shooting excursions to various parts of the bay were much enjoyed by the boats' crews, and the forward part of the ship began ere long to be ornamented with bearskins that the men had obtained by purchase or barter from the natives. Meanwhile we had been making arrangements with the Ispravnik, and the individual I have before mentioned under the title of the King of Kamschatka, for the ponies that were necessary for the first part of our journey; but, as there was some delay in getting 133 together the requisite number, a party of us started to visit the hot springs of Kluchi,[1] which lie some few miles from the shore on the other side of the bay. Excepting during strong south-easterly winds, which send a somewhat heavy swell into the entrance, the passage across is generally pleasant enough even in small boats. Though blocked with ice in the winter, the bay is, we understood, but rarely frozen right across, although the harbour of Petropaulovsky is, of course, closed for some months. Landing in a bay north-west of the entrance to Tareinska Harbour, we passed through an extensive birch-forest, and emerged at length on the shores of a

[1] Kluchi, I believe, is the Russian word for springs.

136 Avatcha River, and forty versts from Petropaulovsky. We passed
137 through the same monotonous forests of birch as before, which, like
487 those of other northern countries, seemed singularly devoid of animal life. An occasional coal tit, which from its note and habits appeared identical with the tame little freebooter of our own gardens, or the tapping of a woodpecker,[1] alone broke the almost death-like stillness which reigned around. We had struck a well-marked trail, and progressed in Indian file, the packhorses (tied in fours, each to the tail of the one in front) leading the way, and relieving the monotony by an occasional breakdown or a stampede.
231 Almost all these ponies are strong and well shaped, but from the ill-treatment they receive at the hands of their masters, have learned to bite, kick, and shy on all occasions, together with other accomplishments of like nature which were somewhat apt to dis-
000 turb our equilibrium. There was but one saddle among us, and the "Kamschatkan Peats," as we named the combination of pillow and pack-saddle which we used as a substitute, though comfortable enough when we ambled along quietly, were apt to become slightly insecure when, as a naval member of our party expressed it, we "made bad weather."

The path between Stari-ostrog and Petropaulovsky appears to be tolerably well-travelled, to judge from the frequency with which we came across the marks of old camping-grounds, but we met with no one on our way. It was afternoon when we reached the river, and crossing a small affluent, found ourselves opposite the village. We had ridden on ahead, and were hailing the natives for canoes in which to cross, when a tremendous clattering in our rear caused us to turn, and we beheld the cook's horse advancing in full stampede, but minus his rider. Beneath his belly a large canteen swung violently from side to side, half-open, and discharging a shower of tin cups, knives, forks, plates, tea and coffee kettles, and other articles of like nature in all directions. We retraced our steps sadly, picking up such articles as we could find, but

[1] *Picus tridactylus*, considered as a distinct species (*P. albidior*) by Dr. Stejneger.

22: Guillemard T-2 (1882) 1886 Kamchadal

132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231/361 We reached Narchiki early in the afternoon, and were greeted by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 136 226 Narchiki is placed on a little branch of the Avatcha River, which is here not more than eighteen inches deep. Standing upon its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our 136 226 horses nearly stepped upon them. Their back fins were visible as far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

136 when the first heavy snow falls, at or about the beginning of the month of October. If in poor condition the bear is said not to hybernate till much later. According to the natives, the animals are tolerably fat on emerging from their dens, and support themselves on grass until the arrival of the fish.

133 137 Our road, some time after leaving Narchiki, had led to the west, in order to avoid a range of mountains of no great height which trends in a south-easterly direction from the village of Gunal. We now turned north once more, and entered a beautiful valley. To the east lay the range we had been circumventing, rising to a height of about 4000 feet, its large patches of snow glittering in the bright sun. The outline of these mountains was most picturesque; and, as we advanced, we opened out a group of *aiguilles* so jagged as to resemble a mass of inverted icicles. The valley was scantily clothed with juniper-bushes and dwarf birches, and early autumn had already touched the landscape here and there with patches of bright yellow. As we rode over the ruddy ground, which with its brilliant parti-coloured moss is so characteristic a feature of northern landscapes, we put up several coveys of ptarmigan; and on the outskirts of a small wood we obtained our first Capercailzie, a young bird which, like many other birds of this region, was characterised by the presence of a good deal of white in the plumage. The day was glorious, and so hot that we rode in our shirt-sleeves; our enjoyment only marred by the almost constant stumbling of our horses over the stumps and roots of the trees. The Kamschatkan ponies, which are generally iron-grey in colour, and stand about thirteen hands, are well shaped and have a good barrel, and are capable of a considerable amount of work. Owing, however, to the rough usage to which they are subjected, they are determined kickers, and obstinate to a degree; and it is most difficult to make them lead the way, or, if behind, to prevent them from following in the exact track of those in front. No food is carried for them, and not content with the nightly meal they obtain when picketed, they one and all feed in snatches as they

132 136 231

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
·361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the
793 western side of the peninsula. The Gunalians are all Christians, and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 who suffer from a plethora of callers in our own country. I commend the suggestion to the more progressive of my readers.

231/492 The inhabitants of the village had already begun to get in and tie up their dogs in anticipation of the coming winter. There were over two hundred of them here, and we had ample opportunity of studying their habits. Most of them are white, with

BALAGAN AND SLEDGE DOGS.

black heads, or entirely of a brown-black, and their general aspect, owing to the sharp muzzle and prick ears, is decidedly wolf-like,—an appearance that one is familiar with from the sketches of North American travellers. The only food they are provided with by their masters is salmon of the hump-backed kind—the Garbusa; but during the summer, as I have already said, they pick up game, eggs, and birds in their wanderings about the country. They are usually inspanned in teams of eight or ten, but where the sledges are heavy or the roads bad, double that number, or even more, are occasionally used. When the snow is hard and even, they will

22: Guillemard T-2 (1882) 1886 Kamchadal

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draw a weight of 360 lbs. a distance of five-and-thirty or forty miles with ease in a day's work; and with an unloaded sledge with a single occupant, a pace of eight versts an hour can be kept up for a considerable time. On the road they are given one-third of a fish twice during the day, and a fish and a half at night, which they wash down with a few gulps of snow. The dogs are castrated when puppies, and have their tails cut at the end of the first year. Each has a name, which he answers to when he is driven in the sledge just in the same way as a Cape ox in a waggon team, for no whips are used. If chastisement be necessary, the driver throws his stick at the delinquent, or pounds the unfortunate creature with any stone that comes handy. There are many ways of tethering these animals, all having in view the one object of keeping them apart, as, excepting upon the road, they seize every opportunity of fighting. One method—the one that obtrudes itself most upon the traveller's notice—is by making a large tripod of poles, and tying a dog at the bottom of each; and in many villages, owing to the large number of dogs which have to be kept, these tripods form a characteristic feature.

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We had many reasons to induce us to take a couple of days' rest at Gunal. Louis was suffering from a chill consequent on the wetting of the previous day; one of us had a slight touch of fever caught some years before in Africa; and at the camp kitchen Cook sat a prisoner as a surgical patient, imperturbably smoking cigarettes and picking up Russian from Afanasi. A slight injury to the ankle, combined with mosquito bites and many hours of riding, had produced an inflamed leg,—a rather awkward accident at this juncture, as we wished to press on as rapidly as we could. In addition, the camp gear needed drying after Vodki's exploit, and as there were said to be plenty of bear in the neighbourhood, we settled to remain.

The following day was gloriously hot, and before long the camp presented the appearance of a washerwoman's drying-ground. The sun heat was, indeed, so great that we gladly took refuge in

177 Most 1
231 of them were clothed in leather breeches and the boots I have
291 already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

164 If leprosy be in any way connected with a diet in which fish is
262 one of the chief constituents, as is by some supposed to be the case,
757 in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

133 We paddled merrily down stream in spite of the still unsettled
137 arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

[i.e., the inhabitants of Mashura--analyst]

24: Lansdell-636-637 M-2 (1879) 1882 Kamchadal-1-2
116, 136, 231, 492

" Among the animals of Kamchatka there is none with which the traveller becomes more familiar than the dog, which is found wild on the hills. The color is usually buff or silver-grey, and in nature and disposition he resembles the mastiff and the wolf, [637] sleeping, like the latter, more by day than by night. He is intelligent as regards his work, but not affectionate, as may be said of the steppe dogs, and has to be ruled by the rod. It is not usually safe to leave these dogs loose, for they kill fowls, deer, smaller dogs, and sometimes even children. (1) As on the Amur, they are usually fed on fish,

1. They love sledging, and upon a journey of four or five days will work from 14 to 16 hours out of the 24 without tasting food, the idea of their masters being that, when travelling, the less food the dogs receive, short of starvation, the better. The travelling sledge weighs about 25 lbs. (a freight sledge is heavier), and a good team will travel from 40 to 60 miles a day. When running, they must be paired with dogs known to each other from puppies; and, should they happen to cross the scent of a deer, so fond are they of its flesh that they sometimes become utterly unmanageable, upset the sledge (or nartee, as it is called), and leave the driver, it may be, to perish in the snow.

particulary the salmon, besides which there are caught in Kamchatka, or off its coasts,

24:Lansdell-636-637 M-2 (1879) 1882 Kamchadal-2
116, 136, 231, 492

the cod, herring, smelt as also whales, walruses, and seals. The country abounds with geese, ducks, and a variety of wild fowl."

28: Sarytschew--63-64 T-1 (1789-90) 1806 Kamchadal-1-2
116, 231, 492, 493

"On the approach of winter, the inhabitants are busied with putting their sledges in order, and tying up their dogs, to fit them for drawing, as they are in fine weather allowed to run loose. Sledges and dogs are in general use here, both for travelling and conveyance. ...

The sledges here differ very considerably from those of Ochotsk, being shorter, smaller, lighter, and much higher. They will scarcely hold two, and are very unsteady on account of their monstrous height. In descending any hill, the utmost care and dexterity is requisite, to keep the feet and the oschtol in the proper direction; for the smallest oversight of this kind may cost a person his life, as has been the case with even experienced drivers, who have been dashed to pieces against the trees lying in the way.

The management of the dogs is no less difficult and dangerous here than at Ochotsk; for they are equally apt to become ungovernable on the scent of any animal. In order to stop them, they drive the oschtol between the front sledge of the conveyance as far into the snow as possible, and always keep the two fore dogs in a tight rein, that none may be able to run away. When the declivity of any mountain is unusually steep and dangerous, they bind birch-twigs round the bottom of the sledge, to impede its course. The cry of ko ko ko stops the dogs; aach aach drives them on; chna chna chna, turns them to the right; and uga uga uga, to the left. Hunters to not make use of these words, for fear of frightening their game, but strike gently with the oschtol on the right side of the sledge, when they should turn to the right, and bend them down to the snow to the left, when they

should go to the left. Besides the danger in this mode of travelling, it is attended with many inconveniences. You must never let your dogs go loose. If ever you are overturned, you must rather be dragged along in the snow than leave your hold, for it is a great disgrace to lose your [64] dogs, and be obliged to wade through the snow on foot; not to mention that the dogs very often entangle themselves in their harness, in which case, the driver must take off his gloves in the cold to put them to rights, and is often in danger of being soiled with their dung. The worst trick you can play a driver, is to cast a piece of jukol among his dogs, who fight for it until they are thrown into the utmost confusion. If he be in company with others, he is thus prevented from keeping up with them, and exposed to all the inconveniencies of going behind; the principal of which is, that the dung of the other dogs is continually freezing on his sledge, and requires him every moment to clear it away with his knife. When you get to a public-house, you are not free from your dogs. The instant they are unharnessed, they must be tied to a post. Nor can they be immediately fed, for they must wait until the sweat is dried off. A whole or half a jukol is then given them, but the master must stand by to see that every dog gets his part, and also to drive away the crows, which are not very shy in this country. They will collect in great quantities round the dogs if not thus guarded, and snap up all their allowance."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to
133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga;* we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

29:Cochrane T-2 (1821-22) 1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2(1821-22)1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

29:Cochrane T-2 (1821-22)1824 Kamchadal

171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

29:Cochrane T-2(1821-22)1824 Kamchadal

231 ple, were they once imported upon a large scale.
R The dogs, like the aborigines, are on the decline,
177 and probably twenty or thirty years more will
.23 leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 The expenses of the colony have been very great
R to Russia, and must continue so, as long as the
177 present plan is persisted in. The yasack amounts
.65 to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 The depopulated state of this peninsula is also to
758 be attributed to other causes. Their continual wars
R and insurrections greatly thinned them, and these
177 were followed by the introduction of the small-pox,
.75 which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 extinct, and with them the very being of the Yakuti, who are even now going down in an equal ratio.

231 R 177 .23 Much benefit has been derived to the colony from the exertions of the present Chief, Captain Rikord. The rule of never allowing a cow to be killed until she is past calving, is in itself excellent, but the stock on hand is so small that a century would elapse before what can be termed herds of cattle could be seen wandering and feasting upon the almost unbounded pastures of the peninsula. What the different chiefs have been doing for the last fifty years, Heaven alone knows! When Captains King and Clarke were here, they seem to have taken it for granted, or to have been informed, that cattle of all descriptions were in a flourishing state. From the proximity of Okotsk to Tygil, a couple of transports might, in one summer, transport at least one thousand head of cattle, which, repeated for ten years, would place the peninsula in an absolutely enviable situation. This act of humanity would be attended with no expense to the government; the Kamtchatdales would willingly pay the value in sables, and the result would be, that no part of the vast Russian empire would be richer or better provided with food of various descriptions than the distant province of Kamtchatka.

134 241 R 177 .24 Upon the banks of the Kamtchatka, where the land lies distant from the salt water, and sheltered by the mountains from the east winds; as well as

29:Cochrane T-2 (1821-22)1824 Kamchadal

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on those banks which have been enriched by the lava emitted by the volcanoes, barley, oats, and rye have been produced, but in no instance with so much success as to pay the labour. The productions, it is true, have been a little more varied and a little riper, but rarely consumable. In spite of this fact, the gazettes of St. Petersburgh formally and officially announce this year that a quartern of rye produced nine quarterns, and that the size or weight of a common potatoe was three quarters of a pound. Three quarters of an ounce would be a sufficient tax upon credulity: I have no hesitation in saying that both these reports are fabulous in every sense of the word, for I have never seen a potatoe in the whole province either ripe, or larger than a hen's egg.

If large herds of cattle were distributed on the banks of the Kamtchatka, and other favoured places, with the benefit of manure, agricultural implements, and knowledge, no doubt the soil might be made to answer the purpose. I certainly cannot conceive the climate of Kamtchatka to be such, as of itself to preclude the pursuit of agriculture in some of its minor branches, as I consider the soil to be much superior to that of Connecticut, or Massachusetts, or either of our Canadas.

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In the vicinity of Avatcha are to be seen, what are by some termed artificial enclosures, within which cattle were formerly maintained, but I conclude them to be natural enclosures formed by the

29:Cochrane T-2(1821-22)1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert
563 to one or two points not hitherto dwelt on. The
793 children of the natives receive no education, and
871 the children of the Russians but little more. There
R certainly is a school existing in St. Peter and St.
177 Paul's, governed by a priest, and regular school-
.87 master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see
563 how the boys could be kept alive. Of the clerical
793 gentlemen themselves, I may observe, that they
R maintain a great distinction between practice and
177 precept. They are very numerous: I know not what
.79 so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 105

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

22: Guillemard T-2 (1882) 1886. Kamchadal

234 We rested our horses and obtained a draught of fresh milk before resuming our march, for at almost all these settlements cows are kept. The milk is generally very rich, and is one of the few luxuries the country affords the traveller, unless, indeed, the cows should happen to have been feeding on the wild garlic. What effect the diet of half-rotten fish on which the poor animals feed in winter may have, I do not know. We noticed, however, that many of the birds we shot and preserved on the expedition smelt strongly of decaying salmon.

During the land journey the actual number of species of birds we met with was but limited, although individuals of some kinds were sufficiently abundant. The Capercailzie (*Tetrao parvirostris*, Gray), though not unlike the European species with which Scotch and Norwegian sportsmen are familiar, differs from it in several particulars. It is markedly smaller in size, shows a strong tinge of grey on the upper surface, and is especially characterised by the tendency to white in the plumage. The feathers of the wing coverts and those of the prolonged upper and under tail coverts are broadly tipped with this colour, and the general appearance of the bird is very handsome. The forest districts are poor in bird-life; the woodpeckers I have before described, small flocks of buntings (*E. rustica*), bramblings, and two species of the genus *Parus* were almost the only noticeable kinds. One bird, however, which I have not yet mentioned, appeared tolerably common—the sober-coloured, but graceful dark ouzel (*Merula obscura*, Gmel.) I met with it many months later, amid very different surroundings, in the depths of a Bornean jungle. It is migratory in its habits, nesting in Siberia and passing the winter in the Malay Islands.

By the rivers there is more life. Many of the so-called sea-birds haunt the streams for a considerable distance inland, and at Stari-ostrog we found large flocks of a gull closely resembling our own Kittiwake (*Rissa tridactyla*). A graceful tern (*S. longipennis*, Nordm.) was almost equally numerous at the same place, but we did not again meet with it for some time, and on our return to Petropaulovsky it had already departed for the warmer regions of [from Petropavlovsk to the headwaters of the Kamchatka River--Analyst]

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
785 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
736 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

iſlands

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks 1his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. GMEL.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella ruſo-fuſca, medio dorſi nigro. LINN.

1 [Original torn. Probably "it worth"

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

136 wolves are very ſeldom ſeen here, and therefore they are much
262 more eſteemed than the grey. Although the *Kamtſchadales*
237 are called univerſal eaters, yet they never eat the fleſh of either wolves or foxes. The deer and ſtone rams may be reckoned among the moſt uſeful of all the animals in *Kamtſchatka*, becauſe their ſkins are moſt uſed in cloathing. The inhabitants, however, kill but few in proportion to the great numbers that are in
136 this country. The deer live in moſſy places, and the wild rams
224 upon the higheſt mountains; ſo that the hunters of the wild rams
237 leave their dwellings in the beginning of harveſt, and taking all their families with them go to the hills, where they are employed in this chaſe until the month of *December*. The wild rams reſemble goats, but their hair is like the deers'. They have two horns that are twiſted round like the *Ordinſky* rams, but much larger. The horns of thoſe that are of full age weigh each of them from 25 to 30 pounds. They run very ſwiftly, throwing their horns back upon their ſhoulders; ſpring over rocks, and run upon the narrow ledges of the moſt dangerous precipices. Cloaths made of their ſkins are very warm. The fat upon their haunches is equal to that of the deer, and the fleſh is a moſt delicious food. Of the horns they make ladles, ſpoons, and other ſmall utenſils; and the horn entire they carry upon the road at their girdles, and uſe it for a bottle.

136 There are three kinds of rats; the firſt of which is of a brown colour, as large as the greateſt houſe-rats in *Europe*: but their cry is very different, reſembling the ſqueaking of pigs; otherwiſe they are very like our common rats. Of the ſecond kind there are but few, and theſe in the houſes, where they run about without fear, and live upon any offals. The third ſort have a diſpoſition ſomewhat like the drones among bees, laying up no manner of proviſion, but ſtealing their food from the firſt kind, which live in the fields, woods, and high mountains, in great numbers.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

231 in the greateſt ſtorm, when a man cannot ſee the path, nor even
492 keep his eyes open, they very ſeldom miſs their way; and if
825 they ſhould, they go from one ſide to the other, 'till by the
237 ſmell they find it again: and when it is abſolutely impoſſible to
787 travel at all, which often happens, then the dogs lying round their maſter deſend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231 Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

CHAP.

225 237 commonly hunt them with dogs when the ſnow comes in drifts, and they wander at too great a diſtance from the river. They uſe their ſkins to make borders round their garments, but principally to preſerve the ſable-ſkins, which are obſerved to be preſerved better, when wrapt in otter-ſkins than any other way.

136 It is incredible to think what a number of ſeals there are in the ſeas and lakes of that country, eſpecially when the fiſh come up the rivers, which they follow in droves, not only to the mouth, but even far up the ſtream. So numerous are they that all the iſlands or ſand-banks are quite covered with them, inſomuch that ſmall boats are in great danger near theſe places. When the ſeals obſerve any boat approaching they throw themſelves in great numbers into the water, which makes ſuch a motion in it as will overſet the canoes or ſmall boats, if they go at once into it. No animal has a more diſagreeable cry, and their noiſe is inceſſant.

There are reckoned to be four ſorts of this animal; the very largeſt of which is catched from 56° to 64° of north latitude. This ſort only differs from the others in its bulk, which exceeds that of a large ox. The ſecond ſpecies is about the ſize of a yearling bullock. Their ſkin is of different colours, ſomething like the ſkin of a tyger; having ſeveral ſpots of equal largeneſs on the back, with a white and yellowiſh belly. Their young ones are as white as ſnow. The third is yet leſs than the former. Its ſkin is yellowiſh, with large cherry-coloured circles, which take up near the half of its ſurface. The fourth kind is ſeen in the large lakes of *Baikaal* and *Oronne*. Its ſize is like thoſe that are found near *Archangel*; and their colour is whitiſh.

They are very vivacious: I ſaw one, that was taken by a hook in the mouth of the Great River, throw itſelf upon people with great fierceneſs, even after its ſkull was broken into pieces. I obſerved that he was no ſooner brought on ſhore

than

than he began to try to run again into the river; and when he found that this was impoſſible, he began to weep; and when they beat and bruiſed him, it only made him more fierce and wild. 136

The ſeals never go farther from the ſhore than 30 leagues; and are moſt commonly to be found near the mouths of great rivers or bays: they will follow the fiſh 80 verſts up a river. They bring forth only one young one, which they nouriſh with two breaſts. The *Tunguſi* give the ſeals' milk to their children for a medicine. The old ſeals cry like one that ſtrains in vomiting, and the young like people groaning through pain. When the tide goes out they lie upon the dry rocks, and in play puſh one another into the water; but when they begin to be angry they bite one another very cruelly. They ſleep very ſound: but, being awakened by the approach of any one, they are in very great fear; and haſtening towards the ſea, to make the way ſmoother, as is ſuppoſed, they vomit out water.

There are different ways of killing them: In the rivers they ſhoot them with ſcrewed-barrelled guns; but they muſt be careful to hit the head, becauſe a hundred bullets will not do them the leaſt hurt in any other place, as they all lodge in the fat that covers their body. They ſearch for them upon ſhore, and ſurpriſing them in their ſleep kill them with clubs: or when they ſleep, laying their ſnout upon the ice, they drive a knife quite through the ſnout, which being faſtened to a long thong they drag the animal out. 225

The ſeals are not ſo dear as one would imagine the many uſes they put them to ſhould render them; for, beſides the uſe of their fat and fleſh, the ſkins of the larger ſort ſerve for ſoles of ſhoes. The *Koreki*, *Olutores*, and the *Tchukotſkoi*, alſo make boats or baidares with them of different ſizes, ſome even ſo large that they will carry thirty men. Theſe boats have this advantage over 237

thoſe

237 262 thoſe made of timber, in that they are much lighter and go ſwifter. Of the ſeals' fat both *Ruſſians* and *Kamtſchadales* make candles; and beſides the natives eſteem it ſuch a delicacy that 251 they can have no feaſt without it. The fleſh they boil or dry in the ſun; but if there are great quantities, they ſmoke or bake it in the following manner: They dig a large pit in proportion to the quantity of fleſh or fat, and pave the bottom with ſtones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the aſhes, then lay at the bottom a layer of green poplar wood, upon this another of ſeals' fleſh or fat, each ſeparately; and thus alternately wood and fleſh until the pit be quite full. They then cover it with graſs and earth, to keep in the heat; and after ſome hours they uncover it, take out the fat and fleſh, and lay it up for the winter. Both fleſh and fat thus prepared is much more delicate than what is boiled; beſides, it keeps without ſpoiling for a whole year.

825 When they have picked all the fleſh from the heads of the 796 ſeals they ſhew them all the reſpect that they would to a particular friend that viſits them. I ſaw this ceremony in the 782 year 1740 at the little fort of *Krodakighe*, which ſtands upon a river of the ſame name that falls into the Eaſtern Ocean. It was performed in the following manner: They brought in the ſkull or head of a ſeal, bound round with the ſweet graſs, and placed it upon the floor. Then a *Kamtſchadale* entered with a bag filled with the ſweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtſchadales* rolled in a great ſtone, and ſet it oppoſite to the entry of the hut, about which they laid ſeveral ſtones; and two others tore the ſweet herb, and made it into ſmall bunches. The great ſtone was to ſignify the ſea, the ſmaller the waves, and the bunches of the ſweet herb the ſeals. This being done, they took three diſhes of caviar mixed with kipre, hurtleberries, and ſeals'

fat

225 three ſea lions are a great load for their boats; and, as it is
302 eſteemed diſhonourable to leave any game which they have caught, they ſometimes ſo overload their boats, that, though they are very expert in the management of them, they and their game go to the bottom together. In theſe veſſels they go to the deſert iſland *Alaide*, which lies out at ſea about thirty miles, and are ſometimes carried four, five, and even eight days without ſeeing any land, expoſed to the cold of theſe climates; and without any compaſs, they return to their habitations by obſerving the ſun or moon.

237 Of the ſkins of the ſea lion they make cords, ſhoe-ſoles, and
136 ſhoes. The female has two, three, and ſometimes four young ones. They couple in the months of *Auguſt* or *September*; and are pregnant about ten months, as they generally bring forth their young about the beginning of *July*. The male treats the female with great tenderneſs, not like the ſea cat, but by fondneſs endeavours to gain her affection. Both male and female ſeem to take very little care of their young, frequently ſtifling them under their paws as they ſuck; nor do they ſhew
136 any concern at ſeeing them killed before their eyes. The young are not lively nor full of play, like moſt other young animals; but are almoſt continually aſleep. Towards the evening the male and female ſwim out to ſea with their brood, but not far from the ſhore. The young climb upon the mother's back, and reſt themſelves; the male in the mean time playing about toſſes the lazy puppies into the water, to oblige them to learn to ſwim. Some of them have been thrown into the ſea, but inſtead of ſwimming away they haſten again to land. They are twice as large as the young of the ſea cat. Although theſe animals naturally run from a man, yet it has been obſerved that they are not always ſo wild; particularly when their young have ſcarcely learned to ſwim. Mr. *Steller* lived ſix days in a high place amongſt whole herds of them, and out of his hut ſaw

ſeveral

but in the old ones it turns grey. The young ones have 136
their hair long, brownish, and very soft. This is the most peaceable of all the sea animals; it never makes any resistance, but endeavours to save itself by flight. The females are very affectionate to their young, and carry such as cannot swim upon their belly between their fore feet; for until the little ones can swim themselves the mother swims upon her back. When the fishermen pursue them, they never quit their young' till the very last extremity; and if they should happen to slip them they presently return to where they hear them cry; so that the fishers endeavour to kill or catch the young, as the most effectual method of taking their dams. They have three different ways of catching 225
them: 1st. By nets placed among the sea cabbage *, whither the beavers retire in the night time, or in storms. 2dly, They chace them in their boats, when the weather is calm, and kill them in the same manner they do sea lions or sea cats. The third method is upon the ice, which in the spring is driven on the coast by the east wind; and this last is so general, that when the ice is driven so strongly upon the shore that the people can pass upon it with snow shoes, they consider it as an acquisition of great treasure, and all the inhabitants upon the coast hunt and kill vast numbers, as they stalk along the ice seeking an opening to get into the water. However, such a drift of ice upon the coast does not happen every year, but when it does, they call it a good year; for the natives, Cossacks, and merchants, find a great advantage from this trade. The *Kuriles* did not 237
esteem the skins of beavers more than those of seals or sea lions 291
before they saw the value that the *Russians* put upon them; and even now they will willingly exchange a dress made of beavers'

* Focus marinus.

237/291 for a good one made of dogs' ſkins, which they think are warmer, and a better defence againſt the water.

136 Beſides thoſe already deſcribed, there are ſeveral other ſea animals here, the moſt remarkable of which is the manati, or ſea cow. This animal never comes out upon the ſhore, but always lives in the water; its ſkin is black and thick, like the bark of an old oak, and ſo hard that one can ſcarcely cut it with an ax; its head in proportion to its body is ſmall, and falls off from the neck to the ſnout, which is ſo much bent that the mouth ſeems to lie below; towards the end the ſnout is white and rough, with white whiſkers about nine inches long; it has no teeth, but only two flat white bones, one above, the other below; its noſtrils are near the end of its ſnout, in length and breadth about an inch and a half; they are double, and within are rough and hairy; its eyes are black, placed almoſt in the middle, and near in one line with the noſtrils, they are no larger than ſheep's eyes, which is certainly remarkable in ſuch a monſtrous creature; it has no eyebrows nor eyelaſhes; and its ears are only a ſmall opening; its neck is not eaſily diſcovered, the head and body being ſo nearly joined; however, there are ſome vertebræ proper for turning the head upon, which it actually does, particularly when it feeds, hanging its head like a cow; its body is round like that of a ſeal, being thickeſt about the navel, and growing ſmaller towards the head and tail; the tail is thick, and bent a little towards the end; it ſomething reſembles the beard of the whale, and ſomewhat the fins of a fiſh; its paws, which are under its neck, are about 21 inches long, with them he both ſwims and goes, and by them he takes hold of the rocks, to which he ſometimes faſtens himſelf ſo ſtrongly, that when he is dragged from thence with hooks he will leave the ſkin of his paws behind: it is obſerved that theſe paws are

ſometimes

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 136 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

They angle for this fish near the *Kurilski* islands, and the haven of *Awatscha*, with hooks made of bone or wood. 136

There are likewise several other kinds of fishes in these seas which are not very common in other places; but as they make no part of their nourishment, and are seldom caught, I shall take no notice of them, my design being only to mention such as serve for food to the inhabitants, in this country which produces no grain. The chief of these are salmon of different kinds, which during the summer come in shoals from the sea up the rivers. Of these they make what they call *eukol*, which they use instead of bread; and they boil up the fat, which serves for butter. They likewise make glue of them. 136 262 237

Before I give a particular description of each species apart, I would communicate some observations which regard the catching of these fish, and which indeed are wonderful proofs of the Divine Providence and the goodness of the Creator, who has blest a place with such abundance of fish where there is neither cattle nor grain. 136

In *Kamtschatka* the fish come from the sea in such numbers, that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink. At this time the bears and dogs catch more fish with their paws than people do at other places with their nets. All the fish that swim up the rivers are of the salmon kind, and are commonly called red fish; but the several sorts are so distinct from each other, that *Kamtschatka* alone is thought to produce as many different species as are to be found in all the world besides. Not one fish remains in *Kamtschatka* longer than six months (except gudgeons); for all that are not caught before the end of *December* die, except in some few deep places where there are warm springs. It is observed of all the different species of

136 what leſs than the other two; its colour is like that of the ipatka, except that its bill and legs are black, and that there are two white ſprigs upon its forehead, which reach from the eye to the bill.

The aru *, or kara, belongs to this claſs. It is larger than a duck; the head, neck, and back are black; the bill long, ſtrait, black, and ſharp; the legs black with a caſt of red; it has three black toes, and is web-footed. Great numbers of 237 theſe are found upon the rocky iſlands; and the inhabitants kill 262 them for the ſake of their fleſh, though tough and bad taſted; but more ſo for their ſkins, of which, as well as thoſe of other ſea fowls, they make themſelves garments. Their eggs are reckoned a great delicacy.

136 There are two kinds of tchaiki, or cormorants, found upon this coaſt, which are hardly obſerved any where elſe. They are about the bigneſs of a gooſe, have a ſtrait reddiſh bill about five inches long, and ſharp on the edges, and four noſtrils, ſuch as other cormorants have, two being near the forehead as are found in other birds which are thought to prognoſticate ſtorms, and are thence named Procellaria; their heads are of the middling ſize; their eyes black; their tails eight inches long; and their legs are covered with hair to the knees, but below them are bare; they have three toes of a bluiſh colour, and are web-footed; their wings extend more than a fathom; they are ſometimes ſpeckled; they appear often near the ſhore, but can't ſtand ſtrait upon dry ground, their feet being ſo near the tail that they are not able to balance their bodies: they fly ſlow even when hungry, but when full of meat they cannot raiſe themſelves from the ground; and, having eat too much, they eaſe their ſtomachs by throwing it 237 up; they have a wide throat, and ſwallow fiſh whole; their fleſh is very tough and ſinewy, therefore the natives ſeldom eat it, but in great neceſſity, killing them principally for the ſake of their

* Lomvia Hoieri.

bladders,

237 bladders, which they use instead of corks to their nets. The
223 way of catching them is singular, being angled for as fishes are, in the following manner: they fasten a thick iron, or wooden hook to a long rope or strap, baiting the hook with a whole fish, the point of which comes out near the back fin, and then throw it into the sea; this the cormorants observing gather about it in flocks, and quarrel among themselves who shall have the prize, until the strongest obtains it and swallows it; then being drawn on shore, they take out the hook and bait by putting their hands into its throat. Sometimes they fasten a live cormorant, which they call a decoy, to the rope, and that it may not swallow the bait, tie down its bill with a cord: the others seeing the decoy swim so near the shore, come with greater security to the bait. The *Kamtschadales* make needle cases, and combs to comb their nettles, of the bones of their wings.

136 Besides the above-mentioned tchaiki, or cormorants, there is another species which haunt the rivers: these are called robbers, because they take the prey from the small birds; their tail is forked like that of the swallow.

136 The procellaria, or storm birds, are about the bigness of a
787 swallow, their feathers are all black, except the tops of their wings, which are white; their bill and legs black. They haunt about the islands, and before a storm they fly low and skim the sea, and sometimes into the ships, which the sailors look upon as the sign of an approaching violent gale.

136 The stariki *, or glupishs, belong to this species. The stariki are about the bigness of a pigeon; have bluish bills, and bluish black feathers about the nostrils, which look like bristles; the feathers of the head are of the same colour, interspersed here and there with white ones, which are longer and thinner than the rest; the upper part of the neck is black, but the lower black and

* Mergus marinus niger ventre albo, plumis angustis albis auritus. STELL.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 white speckled. The belly is white, the wings short, the large feathers of which are black, and the rest blue; the sides and tail are black; the feet are red and webbed; and the nails black and small: it 223 haunts about rocky islands, where it likewise builds its nest: The *Kamtschadales* catch these fowls easier than they do the tchaiki, or cormorants: they put on a fur-coat of a particular make, and letting their hands fall down, sit down in a proper place, and wait for the evening; when the birds returning from the sea seek to retire into holes for the night, and in the dark several of them fly into their furs, and are caught.

136 Among the birds described by Mr. *Steller* are the black starikis *, whose bills are as red as vermillion, the right side of which is crooked; it has a white tuft upon its head. He saw a third species in *America*, which was spotted black and white.

The glupisha are about the largeness of the common river cormorants; and are found upon the rocky islands, in high steep places; their colours are grey, white, and black; and are perhaps called glupisha, that is, foolish, because they frequently fly 237 into the boats. Mr. *Steller* says, that numbers of them are caught 223 in the fourth and fifth *Kurilski* islands, which the inhabitants dry in the sun; they squeeze the fat through the skin, which passes very 136 easily, and use it for burning. He likewise writes that all the rocky islands in the sea between *Kamtschatka* and *America* are covered with them. He has seen some as large as a goose, or an eagle; their bills are crooked and yellowish; their eyes are large like those of an owl; they are black intermixed with white spots over the whole body. He once saw, 200 versts from land, great numbers of them feeding upon a dead whale, which served them also to appearance for lodging; and in his passage through the *Penschinska* sea, he saw many of the glupisha, some of which

* Mergulus maximus alter totus niger cristatus, rostro rubro. STELL.

were

7:Lesseps T-3 (1787-88)1790 Kamchadal

562 the moſt laborious offices, think themſelves
352 happy to be allowed to ſleep in it.

Beſides theſe benches and the bed, there is alſo a table, and a great number of images of different ſaints, with which the Kamtſchadales are as emulous of furniſhing their chambers, as the majority of our celebrated connoiſſeurs are of diſplaying their magnificent paintings.

342 The windows, as may be ſuppoſed, are
237 neither large or high. The panes are made of the ſkins of ſalmon, or the bladders of various animals, or the gullets of ſea wolves prepared, and ſometimes of leaves of talc; but this is rare, and implies a ſort of opulence. The fiſh ſkins are ſo ſcraped and dreſſed that they become tranſparent, and admit a feeble light to the room*;

* They produce an effect ſomewhat ſimilar to the oiled paper in the windows of our manufactories.

but

29:Cochrane T-2 (1821-22)1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters will be found, who will prefer to administer justice with clemency and honor, to the degrading of their characters by a mean and derogatory traffic. If an increase of rank, double pay and provisions, an extra pension, and the most unlimited powers are not sufficient to ensure a just discharge of the duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

29:Cochrane T-2(1821-22)1824 Kamchadal

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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THE NATURAL HISTORY OF

KAMTSCHATKA.

PART II.

CHAP. I.

137 *Of the* SOIL.

UPON the banks of the river *Kamtſchatka* is found plenty of roots and berries, which in ſome meaſure ſupply the want of corn. There is alſo wood ſufficient not only for building houſes, but even for ſhip-building; and Mr. *Steller* is of opinion, that near the head of this river, both ſummer and winter corn would grow as well as in any other places in the ſame latitude, the ſoil being deep and rich; and though ſnow falls in very great quantities, yet it thaws early enough, and the ſpring is not ſo rainy, nor have they ſuch damps, there as in many other places. Several tryals of ſummer-corn have been actually made both in the upper and lower *Oſtrog* * of *Kamtſchatka*; in which both barley and oats have ſucceeded. At the monaſtery of our Lord of *Jakutſki*, they have

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* *Oſtrog* is a little town fortified with palliſades, where the *Ruſſian* Coſſacks, and other inhabitants live.

134 241 ſeveral years paſt ſown ſeven or eight poods † of barley, which yielded a crop not only ſufficient for groats and meal for their own uſe, but even enough to ſupply their neighbours, though they are obliged to plough their land with men.

All garden ſtuff thrives not alike; the moſt ſucculent produce only leaves and ſtalks. Cabbage and lettice never grow to any head, and the peas continue in flower until late in the harveſt without yielding ſo much as pods; but garden roots which are full of juice, ſuch as turnips and radiſhes, grow very well. Theſe tryals, however, were only made upon the banks of the Great River and *Awatſcha*. Such things as require a hot ſoil, grow very well every where, but ſtill beſt upon the *Kamtſchatka*. Upon the Great River I never ſaw any turnips larger than three or four inches diameter; but upon the *Kamtſchatka*, I have ſeen them four or five times as big.

137 The graſs grows here ſo high, and is ſo full of ſap that one ſcarcely ſees any thing like it in all the empire of *Ruſſia*; near the river and lakes, and in the opening of the woods, it riſes to above the height of a man, and ſo faſt that it may ſometimes be mowed thrice in a ſummer; ſo that few places can be more proper for breeding of cattle; and although the blades are thick and high, and make but a coarſe ſort of hay, yet the cattle are large and fat, and give plenty of milk both ſummer and winter, which I attributed to the richneſs of the ſoil and the ſpring rains. The graſs continues full of juice, even to the beginning of winter, which being condenſed by the cold prevents the graſs from turning hard during that ſeaſon. As the graſs is ſo high and thick, a great deal of hay may be made upon a ſmall ſpot; and the cattle can find food in the fields all the winter. The places where 132 the graſs thus grows are never ſo much covered with ſnow as the bogs and ſwamps, and for this reaſon it is difficult to travel over them in the winter.

† A pood is a *Ruſſian* weight of 40 lb.

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5: Jochelson A-5 (1910-11) 1928 Kamchadal

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The Russian Government repeatedly tried to introduce agriculture and gardening into Kamchatka. For this purpose peasants from Southern Siberia and European Russia were transferred several times to Kamchatka, but all experiments have failed and the imported husbandmen turned to fishing and hunting. Only in the valley of the Kamchatka River, near the village Kluchevskoye, small sowings of barley are still being made, but without any economic importance.

Experiments with gardening appeared to be more successful. Potatoes grow all over Southern Kamchatka where the digging of edible roots had almost ceased. Turnips grow there and the inhabitants of Kluchevskoye also grow cabbage, which heads well.

CLIMATE OF KAMCHATKA

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The following data on the climate of the Kamchatka Peninsula are based on observations made in 1908–1909 by the members of the Meteorological Division of the Riaboushinsky Expedition headed by Dr. V. A. Vlasov.[1]

As climate is one of the most effective nature-agents regulating human life, data concerning three chief regions of the country will be given: the western coast, the eastern coast and the central part, represented chiefly by the valley of the Kamchatka River. The western and the eastern shores represent maritime climates, while the climate of the central part may be characterised as a continental one.

The climate of the western coastline of Kamchatka is more severe than that of the eastern, due to the cold Okhotsk Sea. During the winter cold winds prevail, blowing from the Siberian continent, the region of the great Siberian anticyclone. A late spring and a cold summer characterise the climate of the western coast. On the eastern shore of Kamchatka, under the moderating influence of the Pacific Ocean, frosts in the winter are not so severe. Rain and snowfall are more abundant. However, the cold current arriving from the Bering Strait and the amount of ice which it brings delay the beginning of summer and reduce its temperature.

The climate of the central Kamchatka, confined by its western and eastern mountain ridges, i. e., the valley of the Kamchatka River, distinguishes itself by all the peculiarities of a continental climate, having a cold winter and a comparatively warm summer. In order to demonstrate what has been said of the three climatic regions, mean annual figures for three points are given: for Tighil on the western shore, Petropavlovsk on the eastern shore and Kluchevskoye in the valley of the Kamchatka River.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
Tighil	−20.0	−19.8	−13.6	−2.2	2.4	6.2	11.3	12.1	7.0	−1.0	−7.4	−17.2	−3.5
Petropavlovsk	−10.9	−11.2	− 7.0	−1.6	3.1	7.9	11.9	13.5	9.3	4.3	−1.8	− 6.8	1.0
Kluchevskoye	−16.4	−15.2	−11.3	−1.5	4.8	8.5	13.15	13.1	8.8	−1.4	−7.8	−13.0	−2.0

[1] See V. A. Vlasov, The Kamchatka Expedition of F. P. Riaboushinsky organised by the Imperial Russian Geographical Society, Meteorological Division, vol. 1, part 1, *On the Climate of Kamchatka*; part 2, on *The Temperature of the Waters*. Moscow, 1916 (in Russian). Centigrade thermometers were used.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

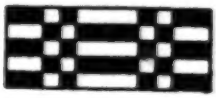
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



7:Lesseps T-3 (1787-88)1790 Kamchadal

563 ſent be made of it. The ſwell of water had been ſo great as to overflow the ſluice, and to ſpread itſelf over a part of the plain where it was frozen. The ſoil appeared to be good, and the country round it to be very pleaſant. I queſtioned the Coſſacs upon the productions of their canton, where I conceived every ſpecies of corn might be cultivated with ſucceſs. They told me that their laſt harveſt had, both in quantity and quality, ſurpaſſed their hopes, and was not inferior to the fineſt harveſts in Ruſſia; two pouds of corn had produced ten.

563 Arrived at Milkoff, I was aſtoniſhed no
361 longer to ſee either Kamtſchadales or Coſ-
241 ſacs, but an intereſting colony of peaſants
R whoſe features and addreſs told me they
177 were not a mixed breed. This colony was
. 24 ſelected in 1743, partly in Ruſſia and partly in Siberia, among the primitive inhabitants, that is, among the huſbandmen. The view of

7:Lesseps T-3 (1787-88)1790 Kamchadal

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of administration, in sending them into this country was, that they might clear the land and make experiments in agriculture; hoping that their example and success would instruct and encourage the indigenes, and induce them to employ their labours in this advantageous and necessary art. Unfortunately their extreme indolence, which I have already described, little corresponded with the wise intentions of government; and so far are they from pretending to any rivalship, that they have never derived the smallest advantage from the examples that are before their eyes. This extreme sluggishness of the natives is the more painful to an observer, as he cannot but admire the industry of these active emigrants, whose labours have been attended with such beneficial effects. Their habitations, situated upon the Kamtschatka, seem to shew that they live at their ease. Their cattle thrive well from the great care they take of them.

I observed

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 I obſerved alſo that theſe peaſants had in
241 general very much the air of being content-
R ed with their ſituation. Their labour is
177 profitable, and not exceſſive. Every man
.24 plows and ſows his field, and having only his capitation to pay, he reaps abundantly the fruit of his exertions, which a fertile ſoil repays him with uſury. I am convinced that greater advantages might be derived from this ſource, if the cultivators were more numerous. The harveſt conſiſts chiefly of rye, and a very ſmall quantity of barley. This colony has nothing to do with the chace. Government extended its cares ſo far as to prohibit it, that their labours might be wholly devoted to agriculture, and that nothing might divert their attention. The prohibition however, I could perceive, is not very ſcrupulouſly obſerved. Their chief is a *ſtaroſte*, appointed by adminiſtration, and ſelected from the old men of the village, as the name implies. His buſi-

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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neſs is to inſpect the progreſs of agriculture; to preſide over their ſeed time and their harveſt, to fix the preciſe period when they are to take place; in ſhort, to ſtimulate the negligence, or encourage the zeal of the labourers, and particularly to maintain the ſpirit of the eſtabliſhment and a good underſtanding among them.

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Being deſirous of going to Machoure, to ſpend a day with the baron de Steinheil, I left M. Kaſloff at Milkoff, and ſet out twenty four hours before him, that I might occaſion no delay in his journey. To travel with the greater expedition I made uſe of a ſmall ſledge. The roads were no better or leſs obſtructed with ſnow than what we had before experienced, and I was therefore unable to make the ſpeed I intended, notwithſtanding my precaution. The firſt vil-
361 lage I came to was Kirgan. Before I reached it, I paſſed a number of houſes and

balagans

22: Guillemard T-2 (1882) 1886 Kamchadal

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

Every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

22: Guillemard T-2 (1882) 1886 Kamchadal

563/622 The head-man of the village received us on landing—a person of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167/563/241/361 R 177 .24 Melcova owes its origin to an experiment. With the view of encouraging the cultivation of the land and of making something more of the country than a mere hunting district, where the inhabitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian peasants were settled here in 1743, who were to devote themselves entirely to agriculture. The result has been to a certain extent successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

24: Lansdell-636 M-2 (1879) 1882 Kamchadal
116, 132, 137, 241, 286

" The valley watered by the Kamchatka is composed of fine mould, and has abundant natural productions- fir, birch, larch, poplar, willow, cedar, and juniper, and that of larger size than in the same latitude elsewhere in Asia. Raspberries, strawberries, whortleberries, currants, and cranberries abound; and flowers are seen in spring in almost tropical luxuriance. There is much grass in the lower lands, and Mr. Hill records an extraordinary phenomenon in a place he visited respecting the growth and preservation of potatoes. (1) There grows, likewise, a plant in the country called by

1. Admiral Ricord, a former governor of Kamchatka, imported potatoes for seed, and they were planted, but not taken up the following autumn. The next year, being found abundant and good, they were allowed to remain, where , dying and propagating continually, they yielded more than were locally required. Mr. Hill accounts for the phenomenon by the fact that neither damp nor frost could reach the potatoes; for though in winter the snow covers the surface of the frozen ground, yet so great in this vicinity is the internal volcanic heat that the earth is quite dry, and never frozen below a few inches from the surface.

the natives krapeva , from which they make a coarse but very durable cloth. It resembles our stinging -nettle, but is of larger growth and stronger fibre."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts, at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

27: Sauer--310 T-2 (1789-93) 1802 Kamchadal
116, 177, 241, 563 Russia
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"About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Petersburg. Major Reinikin succeeded him in the command, and wished to introduce among the natives the culture of the earth, but could not succeed; he brought potatoe seeds with him; first grew them in his own garden; and from thence they were abundantly distributed all over the peninsula, with every species of garden vegetables, which are cultivated with great success by the Russian inhabitants."

29:Cochrane T-2 (1821-22)1824 Kamchadal

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on those banks which have been enriched by the lava emitted by the volcanoes, barley, oats, and rye have been produced, but in no instance with so much success as to pay the labour. The productions, it is true, have been a little more varied and a little riper, but rarely consumable. In spite of this fact, the gazettes of St. Petersburgh formally and officially announce this year that a quartern of rye produced nine quarterns, and that the size or weight of a common potatoe was three quarters of a pound. Three quarters of an ounce would be a sufficient tax upon credulity: I have no hesitation in saying that both these reports are fabulous in every sense of the word, for I have never seen a potatoe in the whole province either ripe, or larger than a hen's egg.

If large herds of cattle were distributed on the banks of the Kamtchatka, and other favoured places, with the benefit of manure, agricultural implements, and knowledge, no doubt the soil might be made to answer the purpose. I certainly cannot conceive the climate of Kamtchatka to be such, as of itself to preclude the pursuit of agriculture in some of its minor branches, as I consider the soil to be much superior to that of Connecticut, or Massachusetts, or either of our Canadas.

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In the vicinity of Avatcha are to be seen, what are by some termed artificial enclosures, within which cattle were formerly maintained, but I conclude them to be natural enclosures formed by the

The inconſtancy of the ſummer weather not only occaſions the unfruitfulneſs of the land, but is likewiſe a great hindrance to the people in preparing their fiſh againſt the winter; ſo that, although there is vaſt plenty of fiſh, they are not able to prepare ſo much as to prevent a ſcarcity before the winter is over; nor can they preſerve one fiſh out of ten which they hang up to dry, the continual wet breeding worms which conſume it; ſo that the fiſh which the dogs and bears catch themſelves and lay up, ſells very dear in the ſpring. 132 251

In the more diſtant places from the ſea, and eſpecially about the upper *Kamtſchatka Oſtrog*, the weather is very different; it being fine and clear from the month of *April* to the middle of *June*. The rains begin after the ſummer ſolſtice, and continue to the end of *Auguſt*. Deep ſnows fall in the winter; but high winds ſeldom happen, and, when they do, are but of ſhort continuance: and although there does not, perhaps, fall more ſnow than upon the Great River, yet it is deeper, as it lies lighter. 132

The harveſt weather is generally agreeable and clear, except at the end of *September*, when ſtorms frequently happen. The rivers are generally frozen over in the beginning of *November*; for their ſwift current prevents their freezing in moderate froſts. Upon the *Penſchinſka* ſea the winds are generally in the ſpring ſouth-ſouth-eaſt and ſouth-weſt; in the ſummer, weſt; in the autumn, north and north-eaſt; in the winter before the ſolſtice, uncertain; but after that, to the month of *March*, the north-eaſt and eaſt winds prevail. From theſe winds the ſpring and ſummer, before the ſolſtice, are generally thick and heavy; but the weather in the months of *September*, *October*, *February*, and *March*, is more agreeable, and is the time for trade and long journies. In *November*, *December*, and *January*, there is little clear good weather, but heavy ſnows and great drifts, which in *Siberia* they call *Pourgami*. The eaſt and ſouth-eaſt winds blow long and moſt violently, ſometimes for two days together, and with ſuch vehemence, that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237 262 251 those made of timber, in that they are much lighter and go swifter. Of the seals' fat both *Russians* and *Kamtschadales* make candles; and besides the natives esteem it such a delicacy that they can have no feast without it. The flesh they boil or dry in the sun; but if there are great quantities, they smoke or bake it in the following manner: They dig a large pit in proportion to the quantity of flesh or fat, and pave the bottom with stones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the ashes, then lay at the bottom a layer of green poplar wood, upon this another of seals' flesh or fat, each separately; and thus alternately wood and flesh until the pit be quite full. They then cover it with grass and earth, to keep in the heat; and after some hours they uncover it, take out the fat and flesh, and lay it up for the winter. Both flesh and fat thus prepared is much more delicate than what is boiled; besides, it keeps without spoiling for a whole year.

825 796 782 When they have picked all the flesh from the heads of the seals they shew them all the respect that they would to a particular friend that visits them. I saw this ceremony in the year 1740 at the little fort of *Krodakighe*, which stands upon a river of the same name that falls into the Eastern Ocean. It was performed in the following manner: They brought in the skull or head of a seal, bound round with the sweet grass, and placed it upon the floor. Then a *Kamtschadale* entered with a bag filled with the sweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtschadales* rolled in a great stone, and set it opposite to the entry of the hut, about which they laid several stones; and two others tore the sweet herb, and made it into small bunches. The great stone was to signify the sea, the smaller the waves, and the bunches of the sweet herb the seals. This being done, they took three dishes of caviar mixed with kipre, hurtleberries, and seals'

fat

136 greatly: this obſervation probably holds in all kinds of ſalmon
137 trouts. In the fourth year alſo, the lower part to the ſnout be-
251 comes hooked. This ſpecies of fiſh[1] ſwims along with the gorbuſhe, and is caught with it in the ſame net, which is wove of ſmall yarn, the meſhes being about an inch wide. Such as live in the rivers are nouriſhed by the roes of other fiſh; and in the ſummer are found near the heads of ſmall rivers, which they leave in the ſpring. Such as are caught at the beginning of ſummer are ſalted, but thoſe caught later are frozen for the winter.

136 Another ſpecies of fiſh is called muikiſi, and is about the bigneſs of the narka; its ſcales are pretty large; its head is of a middling ſize; the upper part of its ſnout is like that of the goltſa, with the lower part hooked; it has teeth in its jaws and on the ſide of the tongue; its back is blackiſh, marked with round, or ſemicircular black ſpots; and upon each ſide has a large red ſtripe, which goes quite from the head to the tail: this diſtinguiſhes it from all the other ſpecies of this fiſh: it ſwallows all kinds of naſtineſs, and often catches the field mice that happen to ſwim upon the river; and is ſo particularly fond of the nortleberry, that if it ſees any growing upon the bank, it throws itſelf out, and ſeizes either the berry or the leaf of the plant. It is a well taſted fiſh, but is not caught in ſuch plenty as others are. They do not certainly know the time of its entering the rivers, but imagine it is before the ice is gone.

There is a third kind called kunſha, which is about three feet long; the head makes a ſeventh part of the length; the ſnout is ſhort and ſharp; its jaws are furniſhed with teeth; its back and ſides blackiſh, marked with yellow ſpots, ſome of which are round and others oblong; its belly is white; its lower fins and tail blue; and the fleſh white and well taſted. In *Ochotſka* it ſwims in ſhoals, but at *Kamtſchatka* it is more rare, and conſequently more eſteemed.

1. [Goltza]

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l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

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AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatkoi* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

342 to ſuffocate any one who is not inured to bear it: but the
447 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women hesitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 taions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpecially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
● 251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

Horned cattle and horses were imported into Kamchatka chiefly from the
231 Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

417 retains its roundneſs, and preſents on one
576 ſide ſomething like ſteps, but they are ſo incommodious that I was more than once in danger of breaking my neck. In reality, whenever this vile ladder turns under the feet of thoſe who are not accuſtomed to it, it is impoſſible to preſerve an equilibrium; a fall muſt be the conſequence, more or leſs dangerous, in proportion to the height. When they wiſh perſons to be informed that there is nobody at home, they merely turn the ſtair-caſe, with the ſteps inward.

251 Motives of convenience may have ſuggeſted to theſe people the idea of building ſuch ſtrange dwellings, which their mode of living renders neceſſary and commodious. Their principal food being dried fiſh, which is alſo the nouriſhment of their dogs, it is neceſſary, in order to dry their fiſh, and other proviſions, that they ſhould have

7:Lesseps T-3 (1787-88)1790 Kamchadal

251/231 have a place ſheltered from the heat of the ſun, and at the ſame time perfectly expoſed to the air. Under the collonnades or ruſtic porticos, which form the lower part of their balagans, they find this convenience; and there they hang their fiſh, either to the ceiling or to the ſides, that it may be out of the reach of the voracioufneſs of their dogs. The Kamtſchadales make uſe of dogs* to draw their ſledges; the beſt, that is the moſt vicious, have no other kennel than what the portico of the balagans affords them, to the poſts of which they are tied. Such are the advantages reſulting from the ſingular mode of conſtructing the balagans, or ſummer habitations of the Kamtſchadales.

Thoſe of winter are leſs ſingular; and if

* As I ſhall ſoon be obliged to adopt this mode of travelling, I ſhall defer my deſcription of the dogs till that period.

equally

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatchā River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared
251 to be teeming with salmon. Stari-ostrog, situated on the right
262 bank, consists of ten huts and a large number of fish-drying sheds. The long Kamschatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226 In company with our English-speaking friend we went to in-
251 spect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133 It was late in the afternoon before we were again *en route*, our
137 course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usually exasperating

22: Guillemard T-2 (1882) 1886 Kamchadal

000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun,—a speck of steely blue against the snow beyond.

132 251 343 361 Gunal, with its enormous stores of salmon, seemed, like all these Kamschatkan villages, a place of considerable size. A nearer acquaintance, however, soon dispelled the illusion, and we noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

27: Sauer--299 T-2 (1789-93) 1802 Kamchadal
251, 825

"The oil extracted from herrings is very pellucid and sweet; it preserves birds' eggs all the year quite fresh and good, as does also the oil of seals, whales, &c."

27: Sauer--312-313 T-2 (1789-93) 1802 Kamchadal
116, 221, 222, 251

"The Kamtshadals and residentiary Russians employ themselves during the summer in catching fish; drying some, and salting others for a winter supply for themselves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the [313] sweet plant, and kiprey: the former is purchased by government for the distillery of brandy, at three and four roubles the pood when prepared and dried. In the spring they collect birds' eggs about the marshes, and particularly among the rocks at the mouth of the bay of Avatsha: these they preserve all the year with oil."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 bages never come to a head, and peas only flower;
137 but turnips and radishes thrive amazingly. Grass of the most nutritious quality is found in the greatest abundance, as well in the numerous meadows as in the forests. It grows to the height of between five and six feet, and in some places three crops are produced within the year.

132 Winter may be said to occupy near one half of the year, spring and summer the other half. The winters are mild when compared to those of Siberia; the thermometer never descending, in the southern parts of the Peninsula, below 20° of Reaumur, and seldom below 12° and 15°. Spring is the most agreeable time, just when the leaves put forth, and it is then the fishing commences. The summer is the most disagreeable portion of the year, owing to the heavy rains and heavier fogs which come from the eternally snow-clad mountains. The greatest heat is in July, when the thermometer is at 27° and 28°. The snow lying upon the ground seven and eight months will sufficiently account for the want of cultivation, but indeed the remaining four can hardly be considered as equal to more than two months in other places; for the sun at St. Peter and St. Paul's has no effect upon the earth during more than four hours of the day, and from the immense height of the mountains, it is only from ten o'clock until two that any heat is felt.

251 This absence of heat, and these changes of climate, with the very heavy fogs, which account for

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2 (1821-22) 824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-m[illegible] [illegible]y† them in the ſun, and
435 ſell them for five or ſix rub[illegible]s the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Harioufkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry?"

which

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is absolutely necessary. The *Russians* were no sooner settled there, than 177
they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. The stem is fleshy, of three or four 137
joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inhabitants gather and prepare it in this manner: they cut off the 222 252
stalks of the leaves which grow nearest the root, and with a shell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

222 ſcrape off the ſkin; and then bind up ten ſtalks together.
252 When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 The women, when they gather this,[1] muſt wear gloves; for the
222 juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 The manner of diſtilling ſpirits from it is as follows:---
556 They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.]

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

137 leaves of this plant are very aſtringent: both the *Ruſſians* and
252 *Kamtſchadales* eat it in the ſpring. They preſerve the root[1] for
262 winter, which they ſtamp and boil for a gruel. It has ſome reſemblance in taſte to the Piſtacho nut.

The morkovai pouſhki, or carrot bunches, are ſo called becauſe they are like carrots in their leaf as well as in taſte. They likewiſe eat this green in the ſpring, but they oftener ſour it like ſour crout, or make a liquor with it.

137 The kotkonia * grows upon the banks of the rivers of *Kamtſchatka* in great plenty. Its root is about the thickneſs of one's finger, bitter and aſtringent, black without, and white within. Sometimes five, but always more than two ſtalks ariſe from this root, about ten inches high, of the thickneſs of a gooſe-quill, and of a yellowiſh-green colour. At the top are three oval leaves ſpread like a ſtar, from the middle of which riſes a ſtalk half an inch high, which ſupports the flower. The cup of the flower conſiſts of three oblong green leaves, and the flower itſelf of as many white ones. In the middle of the flower is the piſtil, of ſix ſides, a yellow colour, with a red top: it contains three cells, and is ſurrounded with ſix equal yellow-coloured ſtamina; the anthera is alſo yellow. When the piſtil is ripe it is as big as a walnut, is ſoft, fleſhy, and of an agreeable taſte, like a pleaſant apple. It flowers about
262 the middle of *May*. The *Kamtſchadales* eat the root of this plant both freſh and dried, with caviar; but the fruit muſt be eaten as ſoon as gathered, for it is ſo delicate that it ſpoils if it be kept one night.

137 The ikoume ‡, or biſtort, grows in plenty both on the hills and
262 in the vallies. The *Kamtſchadales* eat it freſh or dried, and

* Tradeſcantia fructu molli eduli.

‡ Biſtorta foliis ovatis oblongis acuminatis. LINN. Cliff.

1. [Shelmina, Ulmaria fructibus hispidis. Steller] pounded

were black, and others white; but none of them came so near the vessel as to be exactly observed. 136

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone foxes, who watch for them; they breed in the month of *July*; their eggs are green, about the bigness of a hen's egg, and being boiled thicken a little, but are ill tasted; however the *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these creatures are so void of apprehension, that, though they see the next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

136 222 223 252 262

* Columba Groenlandica Batavorum. Stell.

† Corvus aquaticus maximus crissatus periophtalmiis cinnaberinis, postea canidilis. Stell.

much.

252 ſuch a manner that, as victuals are there, it is not bad; they
262 roaſt it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roaſted, they ſkin and eat it.

825 The natives ſay that theſe birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noiſe to the ſound of a trumpet.

136 CLASS II. *Of thoſe Birds which haunt for the moſt part about*
223 *the freſh Water.*

The firſt of this claſs is the ſwan, which is ſo common in *Kamtſchatka*, both in ſummer and winter, that the pooreſt perſon can have no entertainment without a ſwan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in thoſe rivers that do not freeze.

136 Here are ſeven kinds of geeſe, which are diſtinguiſhed thus: large grey geeſe, gumenniki, ſhort necks, grey and ſpeckled, white necks, ſmall white geeſe, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr. *Steller* ſays; who likewiſe writes, that they come from *America*, and that he himſelf ſaw them paſs *Bering*'s iſland in great flocks, flying eaſt in the harveſt and weſt in the ſpring. In *Kamtſchatka* are principally found the large grey geeſe, the gumenniki, and the grey and ſpeckled; the ſmall white gooſe is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vaſt numbers of them; and the beſt down
223 is brought to *Jakutſki* from theſe places. They catch them at the time they caſt their feathers, in the following manner:—— They build huts with two doors, near thoſe places where they moſt commonly ſit at night. The fowler putting a white ſhirt on, above his cloaths, ſteals as near the flock as he can; and ſhewing himſelf

1 [Urile. Corvus aquaticus maximus Cristatus periophtalmiis Cinnabarinis, postea Candidis. Stell.]

CHAP. V.

415 325 *Of their* HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 301 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into a

CHAP. VIII.

Of their DIET *and* LIQUORS, *together with their Method of* COOKING. 262

HAVING already mentioned that the food of the *Kamtschadales* consists in roots, fish, and sea animals, which are all described in the second part of this book, we shall now relate their method of dressing them. And first, we will begin with the fish, which they use instead of bread. The principal food, called *yokola*, is prepared from 252 every sort of fish, and serves them for houshold bread. They 262 divide their fish into six parts; the sides and tail are hung up to dry; the back and thinner part of the belly are prepared apart, and generally dried over the fire; the head is laid to sour in pits, and then they eat it like salt fish, and esteem it much, though the stink is such that a stranger cannot bear it; the ribs and the flesh which remain upon them they hang up and dry, and afterwards pound them for use; the larger bones they likewise dry for food for their dogs: in this manner all these different people prepare the *yokola*, and they eat it for the most part dry.

Their second favourite food is caviar, or the roes of fish, which they prepare in three different ways: they dry the roe whole in the air, or take it out of the skin which envelopes it, and, spreading it upon a bed of grass, dry it before the fire; or lastly, make rolls of it with the leaves of grass, which they also dry. They never take a journey or go a hunting without 262 dry caviar; and if a *Kamtschadale* has a pound of this, he can subsist without any other provision a great while; for every birch and alder tree furnishes him with bark, which, with his

262 dried caviar, makes him an agreeable meal; but they cannot eat either ſeparately, for the caviar ſticks like glue to the teeth, and the bark, although it ſhould be chewed ever ſo long by itſelf, they are hardly ever able to ſwallow down alone. There is ſtill 252 a fourth method which both the *Kamtſchadales* and *Koreki* uſe 171 in preparing their caviar; having covered the bottom of a pit with graſs, they throw the freſh caviar into it, and leave it there to grow ſour: the *Koreki* tie their's in bags and leave it to ſour; this is eſteemed their moſt delicate diſh.

252 There is a third ſort of diet, called by the *Kamtſchadales* 262 *tchupriki*, which is prepared in this manner: in their huts over the fire-place they make a bridge of ſtakes, upon which they lay a heap of fiſh, which remains there 'till the hut becomes as warm as a bagnio; if there was no great thickneſs of fiſh one fire would ſerve to dreſs it; but ſometimes they are obliged to make two, three, or more fires. Fiſh dreſſed in this manner is half roaſted, half ſmoaked, and has a very agreeable taſte, and may be reckoned the beſt of all the *Kamtſchatka* cookery; for the whole juice and fat is prepared with a gradual heat, and kept in by the skin, in which it lies as in a bag, and when ready may be eaſily ſeparated from the fiſh; as ſoon as it is thus dreſſed, they take out the guts, and ſpread the body upon a mat to dry; this they afterwards break ſmall and put into bags, carrying it along with them for proviſion; and when dried eat it like the *yokola*.

252 The *Kamtſchadales* have a diſh, which they eſteem very 262 much, called *huigul*: it is fiſh laid to grow ſour in pits; and 171 though the ſmell of it is intollerable, yet the *Kamtſchadales* eſteem it a perfume. This fiſh ſometimes rots ſo much in the pits that they cannot take it out without ladles; however in that caſe they uſe it for feeding their dogs.

Mr. *Steller* ſays, that the ſummer *Samojeds* likewiſe ſour their fiſh; but that the earth being frozen preſerves it much better;

better; the *Jakutſki* alſo dig deep pits, in which they lay their 252
fiſh, ſprinkling it with wood aſhes, and cover it with leaves at 262
top, and over all put a layer of earth: this method is better 171
than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their 252
troughs, with ſeveral different herbs and roots; the broth they 264
drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, 262
called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink 273
but water: but when they made merry they drank water 177
which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves fre- 271
quently by throwing handfuls of ſnow into their mouths; and 583
the bridegrooms who work with the fathers of their future brides 524
find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

114 At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times. 252 Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones, 323 and there is nowhere in the writings of these authors a reference to clay vessels. 415 Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Palæ-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.

[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I–II, 1819, St. Petersburg (in Russian).

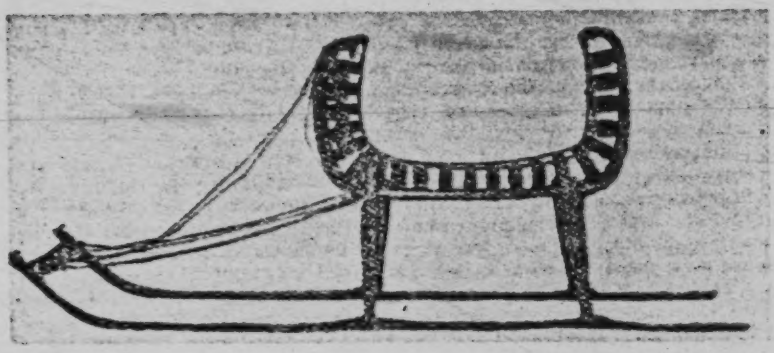
[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1867, p. 139.

[4] See R. Torii, *Étude Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Kluchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851–1855*, p. 326, St. Petersburg, 1890, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thaleichthys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1924, p. 12, in Russian).

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

7:Lesseps T-3 (1787-88)1790 Kamchadal

THEIR PROVISIONS ARE PREPARED NEARLY IN

252 the following manner; it will appear, from
262 the recital, that they cannot be accuſed of much delicacy. They are particularly careful to waſte no part of the fiſh. As ſoon as it is caught they tear out the gills, which they immediately ſuck with extreme gratification. By another refinement of ſenſuality or gluttony, they cut off alſo at the ſame time ſome ſlices of the fiſh, which they devour with equal avidity, covered as they are with clots of blood. The fiſh is then gutted, and the entrails reſerved for their dogs. The reſt is prepared and dried; when they eat it either boiled, roaſted, or broiled, but moſt commonly raw.

The food which the epicures eſteem moſt, and which appeared to me to be ſingularly diſguſting, is a ſpecies of ſalmon, called *tchaouitcha*. As ſoon as it is caught, they bury it in a hole; and in this kind of larder they leave it till it has had time to ſour, or, properly

7:Lesseps T-3 (1787-88)1790 Kamchadal

252 properly ſpeaking, become perfectly pu-
262 trified. It is only in this ſtate of corruption that it attains the flavour moſt pleaſing to the delicate palates of theſe people. In my opinion the infectious odour that exhales from this fiſh, would ſuffice to repulſe the moſt hungry being; and yet a Kamtſchadale feeds voluptuouſly upon this rotten fleſh. How fortunate does he conſider himſelf when the head falls to his lot! this is deemed the moſt delicious morſel, and is commonly diſtributed into many parts. I frequently wiſhed to overcome my averſion, and taſte this ſo highly valued food; but my reſolution was unequal to it; and I was not only unable to taſte it, but even to bring it near my mouth; every time I attempted, the fetid exhalation which it emitted gave me a nauſea, and diſguſted me inſuperably.

262 The moſt common fiſh in Kamtſchatka
372 are trouts, and ſalmon of different ſpecies;

ſea

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 sea wolves are also eaten; the fat of this fish
372 is very wholesome, and serves them beside for lamp oil.

136 Among the vegetables which are made
252 use of by the Kamtschadales, the principal
262 are *sarana* root, wild garlic, *slatkaïa-trava*, or sweet herb, and other plants and fruits nearly similar to what are found in Russia.

The *sarana* is known to botanists*. Its shape, its size, and its colour have been described at large in the third voyage of captain Cook. Its farinaceous root serves instead of bread †. It is dried before it is

* By the name of *lilium flore atro rubente*.

† The Cossacs use rye also, which makes a sort of black bread, like that of the Russian peasants. Government allows them a certain quantity of rye flour, but it is insufficient, and they are obliged to procure more at their own expence. Some of them lay it up in store in order to profit by its future sale.

used;

7:Lesseps T-3 (1787-88)1790 Kamchadal

136 uſed; but it is wholeſome and nouriſhing
252 in whatever mode it may be prepared.
262
273

From the wild garlic* they make a harſh and fermented beverage, which has a very unpleaſant taſte; it is alſo uſed in various ſauces; the Kamtſchadales are very fond of it.

The ſlatkaïa-trava, or ſweet herb, is pleaſant enough when it is freſh. This plant† has alſo been minutely deſcribed by the Engliſh. It is highly eſteemed by the natives, particularly the ſpirit diſtilled from it. Soon after it is gathered, they ſlit it in two, and ſcrape out the pith with a muſcle-ſhell: they then dry it for winter, and

* It is called in Kamtſchatka, *tſcheremſcha*. Gmelin denominates it: *allium foliis radicalibus petiolatis, floribus umbellatis*. Vol. 1. p. 49.

† *Sponditium foliolis pinnatifidis*. See Linn. The juice of the rind of this plant is ſo acrid, that it is impoſſible to touch it without bliſtering the hand. In gathering it they take care to wear gloves.

when

7:Lesseps T-3 (1787-88)1790 Kamchadal

252 when they uſe it in their ragouts, it is pre-
439 viouſly boiled. Brandy is alſo diſtilled from
273 this ſweet herb, which, as I obſerved before, is ſold on account of government: for this purpoſe the plant is purchaſed of the Kamtſchadales*.

162 There are three ſorts of inhabitants, the
563 natives or Kamtſchadales, the Ruſſians and Coſſacs, and the deſcendants from intermarriages.

The indigenes, that is, thoſe whoſe blood is unmixed, are few in number; the ſmall pox has carried off three fourths of them, and the few that are left are diſperſed through the different oſtrogs of the peninſula; in Bolcheretſk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is ſure to be extremely agitated during the night, and to feel the next day as melancholy and reſtleſs as if he had committed ſome crime.

The

18: Yarmolinsky--7 L-4 (no date) 1947 Kamchadal
252, 262

" A native dish regarded as a dainty, which is made by pounding fat with several ingredients, including berries and the roots of sarana [Polygonum viviparum]. 'The tolkusha prepared with reindeer fat tastes well,' writes Jochelson in one of the unpublished studies mentioned above, 'but one cannot say the same of tolkusha with seal's fat.'"

22: Guillemard T-2 (1882) 1886 Kamchadal

136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood 252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of 161 continuance soon commenced. Hour after hour we paddled on 721 through the driving rain, and it was not until after mid-day that 361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen R of huts, with a total population of less than fifty souls; but it 177 enjoys the distinction of being the only settlement on the Kamschatka River that is marked on the English chart of the country. . 72 In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

22: Guillemard T-2 (1882) 1886 Kamchadal

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 252 262 The natives are prevented by law from barring the river in the lower part of its course, and here the salmon are taken chiefly with seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 224 The low and muddy shores of the river in this part of its course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

000 hours' time. It was the white of an egg, with ſome camphire and ſugar, which he rubbed 'till it foamed upon a pewter plate, then tied it in a handkerchief, and bound it upon the forehead. This he found to ſucceed in every inflammation of the eyes.

132 It hails frequently both in ſummer and harveſt; but I never ſaw the hail bigger than peaſe. It ſeldom lightens but at the ſummer ſolſtice. The thunder is alſo but ſeldom heard, and then ſeems to be at a great diſtance. We have no inſtance of any one killed by thunder: the natives ſay, indeed, that before the arrival of the *Ruſſians* they had a great thunder, and ſome were killed by it; but this is to be queſtioned, ſince for ſo long a time we have had no inſtances of it. As to fogs, it is impoſſible that there ſhould be greater any where than at *Kamtſchatka*; and it is to be queſtioned whether deeper ſnows fall any where between 55 and 52 degrees north latitude than here, from the melting of which the rivers ſwell ſo much as to overflow their banks, and the earth in the ſpring is entirely covered with water. The cold in winter is moſt intenſe about the Great River and the *Awatſcha*; but in the lower *Kamtſchatkoi Oſtrog* it is much warmer than in any other place of *Siberia* in the ſame latitude.

The greateſt inconveniency ariſes from the violent winds and ſtorms, concerning which the following remarks may not be improper. Before a great wind, which generally comes from the eaſt, the air is always thick and dark; but, as I had not a thermometer, I cannot be certain if it is warmer then than at other times. The eaſt winds coming from the *Lopatka*, where are burning mountains and warm ſprings, I imagine that they not only ariſe from the narrowneſs of the land, but alſo from ſubterraneous fires and vapours.

135 With regard to other advantages or diſadvantages of this country,
258 one may ſay in general, that its greateſt riches conſiſt in plenty
439 of good furs and fiſh, and its greateſt inconveniences in the want of iron and ſalt. The firſt they are ſupplied with from other

other places, and the ſecond by boiling ſea water into ſalt; but the troubleſome diſtant carriage of the iron, and the boiling of the ſalt, are attended with ſuch expence and difficulty, that they are both ſold at a moſt intolerable price. One cannot buy a common ax under two rubles, and a pound of ſalt coſts four rubles. 135 258 435 439

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS. 133

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſbia, which contains 27 inches.

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY

576
261

WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.
576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

342 According to Krasheninnikoff the ancient Kamchadal had still another kind of summer dwelling, the superterrene grass lodge called bashabash. Unfortunately he does not state its shape—whether it was of a conical or hemispherical type. The bashabash was put up at the fishing places near the dwellings on piles and served chiefly as a place for cooking, which could not be done on the wooden platforms of the pile-dwellings.

• 261 757 171 White clay, pieces of which were found in some of the excavations, was eaten by the Kamchadal, according to Krasheninnikoff (II, p. 180), as a remedy for diarrhœa. Bogoras relates (*The Chukchee*, p. 200) that the reindeer Chukchee, the Koryak and Lamut in Kamchatka, occasionally use as food a kind of white clay called by them nute-ecen (earth-fat). The Kamchadal called the white clay "earth sour cream." Sternberg tells (*The Gilyak*, p. 17) of a Gilyak favorite dish for treating guests, called moss, which consists of a mixture of the gluey broth of fish skins, seal's fat, berries, rice, and sometimes of minced dried fish, to which the solution of white clay is added.

It must be noted that the use of some kinds of clay as food is not limited to Siberia alone. The eating of edible clay has been observed among certain Guiana Indians,[1] Carib and Antillean islanders,[2] and among the people of Georgia and the Carolinas.[3] Deniker refers to many other places where the habit of eating certain earthy substances—kaolin, clay, limestone—has been observed. He calls this habit *Geophagy* and explains it by the need of supplying the needed mineral substances (calcareous or alkaline salts).[4]

[1] W. E. Roth, *An Introductory Study of the Arts, Craft and Customs of the Guiana Indians*, Annual Report of the Bureau of American Ethnology, 1924).

[2] William Sheldon, *Brief Account of the Caribs who Inhabited the Antilles*, Transactions of the American Antiquarian Society, I, 1820, pp. 365–435).

[3] Charlotte D. Gower, *The Northern and Southern Affiliations of Antillean Culture*, Memoirs of the American Anthropological Association, Number 35, 1927, p. 26.

[4] J. Deniker, *The Races of Man*, London, 1900, p. 145.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 foxes, otters, beavers, ſables, hares*, &c.
261 but they have not the ſame dangers to encounter; ſometimes they make uſe of ſnares, conſtructed of wood or iron, leſs than thoſe which are ſet for bears, and reſembling in their ſimplicity our pitfalls; no other attention is neceſſary than that of viſiting them from time to time. The Kamtſchadales ſometimes lie in ambuſh, armed in the manner I have deſcribed; and the only hardſhip they experience reſults from their proviſion being exhauſted in conſequence of the long duration of their chace. They frequently ſubmit to ſuffer hunger for many days together, rather than quit their ſtations till they have obtained the end of their purſuit; but they amply repay themſelves for this faſting, by immediately devouring the fleſh of the animals †, and by the plea-

* Theſe animals are all deſcribed in Cook's voyage.

262 † The fleſh of bears, argali, and rain-deer, is conſidered by them as very wholeſome, the laſt particularly; I frequently feaſted upon it.

ſure

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthus fructu rubro et nigro.
** Sorbus.

the

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-n[illegible]y† them in the ſun, and
435 ſell them for five or ſix rubles the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Hariouſkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry."

which

is only the richer sort of people that use this brandy; and what 273
they sell is only the first running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the first 231
running, and the pood costs four rubles or more. The herbs 273
that remain in the still after drawing off all the spirit, are made use of as a yest, instead of berries, to ferment other infusions or wort; and what they cannot use thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy distilled from the plants from which the skin has not been clean scraped, it causes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1st, that it is very piercing, and contains a good deal of a sharp acid, which coagulates the blood and makes it black: 2dly, that a small quantity of it makes people drunk and quite senseless, and causes their faces to turn black: 3dly, that if a person drinks a few drams of it, he is plagued the whole night with disagreeable dreams, and next day is uneasy and disturbed as if terrified with the apprehension of the greatest misfortune: and, what is very extraordinary, he has seen some people the day after they have been drunk with this spirit, from one draught of cold water, become again so drunk that they could not stand upon their feet. They wet their hair 751
with the juice, which they squeeze out of this herb in the 824
spring, as a preservative against lice, and find it to be their only 842
relief. Many of the *Kamtschadales*, who desire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Asia*, 137
has the third place in the food of the *Kamtschadales*. They 262

* Vedro is a *Russian* liquid measure containing 25 pints.

† Epilobium. LINN. Succ. Spec. 1. French willows.

1 [the sweet herb, sphondylium foliis pinnatifidis Linn. Cliff.

boil

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

ſhew itſelf under the ſnow: and I have heard an extraordinary account of its virtues from the Coſſacks that were employed with captain *Spanberg* in building the ſloop Gabriel: they were ſo ill with the ſcurvy, that ſcarce any were able to work, or even to walk, ſo long as the ground was covered with ſnow; but as ſoon as the high lands began to appear green, and the wild garlick to ſprout out, the Coſſacks fed upon it greedily. Upon their firſt eating it, they were covered over with ſcabs in ſuch a manner, that the captain believed they were all infected with the venereal diſeaſe. In about a fortnight, theſe ſcabs fell off, and they were perfectly recovered of the ſcurvy. 757

We muſt reckon amongſt the food of the *Kamtſchadales* the ſhelmina *, and the morkovai †, which is the ſtalk of a plant that is hollow and juicy, ſuch as the angelica. The ſhelmina is a ſpecies of the ulmaria. Its root is blackiſh without, and white within: it ſends out from one root two or three ſtalks about a man's height; which, near the root, are about a finger thick, but above, ſomewhat thinner. The leaves ſhoot out from long branches which grow all over the ſtalk. Their upper part is green and ſmooth; and their lower rough, with high reddiſh veins. Where the branch ſprings from the root there are two leaves like thoſe above deſcribed, but ſomewhat leſs. The ſtalk is triangular, reddiſh, hard, and rough. At the top of the plant is a flower reſembling that of the ſervice-tree. It has four oval piſtils, flattened in the ſides, with downy edges; in each of which are contained two longiſh ſeeds. They are ſurrounded by ten white ſtamina, riſing above the flower; the anthera being likewiſe white. It flowers about the middle of *July*, and the ſeeds are ripe about the middle of *Auguſt*. The root, ſtalks, and 137 262

* Ulmaria fructibus hiſpidis. STELLER. † Chærophylum ſeminibus levibus nitidis, petiolis ramiferis ſimplicibus. LINN. Cliff. p. 101.

137 leaves of this plant are very aſtringent: both the *Ruſſians* and
252 *Kamtſchadales* eat it in the ſpring. They preſerve the root[1] for
262 winter, which they ſtamp and boil for a gruel. It has ſome re-
— ſemblance in taſte to the Piſtacho nut.

The morkovai pouſhki, or carrot bunches, are ſo called becauſe they are like carrots in their leaf as well as in taſte. They likewiſe eat this green in the ſpring, but they oftener ſour it like ſour crout, or make a liquor with it.

137 The kotkonia * grows upon the banks of the rivers of *Kamtſchatka* in great plenty. Its root is about the thickneſs of one's finger, bitter and aſtringent, black without, and white within. Sometimes five, but always more than two ſtalks ariſe from this root, about ten inches high, of the thickneſs of a gooſe-quill, and of a yellowiſh-green colour. At the top are three oval leaves ſpread like a ſtar, from the middle of which riſes a ſtalk half an inch high, which ſupports the flower. The cup of the flower conſiſts of three oblong green leaves, and the flower itſelf of as many white ones. In the middle of the flower is the piſtil, of ſix ſides, a yellow colour, with a red top: it contains three cells, and is ſurrounded with ſix equal yellow-coloured ſtamina; the anthera is alſo yellow. When the piſtil is ripe it is as big as a walnut, is ſoft, fleſhy, and of an agreeable taſte, like a pleaſant apple. It flowers about
262 the middle of *May*. The *Kamtſchadales* eat the root of this plant both freſh and dried, with caviar; but the fruit muſt be eaten as ſoon as gathered, for it is ſo delicate that it ſpoils if it be kept one night.

137 The ikoume ‡, or biſtort, grows in plenty both on the hills and
262 in the vallies. The *Kamtſchadales* eat it freſh or dried, and

* Tradeſcantia fructu molli eduli.

‡ Biſtorta foliis ovatis oblongis acuminatis. LINN. Cliff.

1. [Shelmina, Umaria fructibus hispidis. Steller] pounded

pounded with caviar. It is far from being ſo aſtringent as that in *Europe*, is juicy, and taſtes like a nut. 137 262

Utchichlcy † is a plant that has leaves like hemp, but flowers like the ragwort. When the leaves are dried, and boiled with fiſh, they make the broth taſte as if the fleſh of the wild goat was boiled in it.

The root called here mitoui, and at *Jakutſki* ſardan, they fry in the fat of fiſh, or ſeals, and eſteem it a delicate diſh.

Theſe are the principal plants which they make uſe of in 262
their kitchens; however there is a great number of others, and 824
alſo of plants thrown out by the ſea, which the *Kamtſchadales* eat both freſh and dry in the winter: for, as Mr. *Steller* obſerves, they refuſe nothing, but eat every thing they can get down, even the drieſt plants and naſtieſt rotten muſhroons, although one would imagine the conſequence dangerous, as indeed it ſometimes happens. However, he tells us the natives have obtained ſuch a knowledge of plants, and of their uſe both in food and medicine, that he is ſurpriſed; and that one ſhall not find ſo much knowledge of this ſort among any barbarous nation, nor even, perhaps, amongſt the moſt civilized. They give a name to every one of their plants, and know all their properties, and the different degrees of virtue which they derive from the various ſoils and expoſitions in which they grow; and ſo accurate are they in theſe diſtinctions, and alſo in the proper time of gathering the ſeveral fruits and other produce, that it is truly wonderful. Hence the *Kamtſchadales* have this advantage above other people, that they can find food and medicine every where; and, by their knowledge and experience, are in little danger from the noxious plants.

† Jacobea foliis cannabis. STELLER.

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 wolves are very ſeldom ſeen here, and therefore they are much
262 more eſteemed than the grey. Although the *Kamtſchadales*
237 are called univerſal eaters, yet they never eat the fleſh of either wolves or foxes. The deer and ſtone rams may be reckoned among the moſt uſeful of all the animals in *Kamtſchatka*, becauſe their ſkins are moſt uſed in cloathing. The inhabitants, however, kill but few in proportion to the great numbers that are in
136 this country. The deer live in moſſy places, and the wild rams
224 upon the higheſt mountains; ſo that the hunters of the wild rams
237 leave their dwellings in the beginning of harveſt, and taking all their families with them go to the hills, where they are employed in this chaſe until the month of *December*. The wild rams reſemble goats, but their hair is like the deers'. They have two horns that are twiſted round like the *Ordinſky* rams, but much larger. The horns of thoſe that are of full age weigh each of them from 25 to 30 pounds. They run very ſwiftly, throwing their horns back upon their ſhoulders; ſpring over rocks, and run upon the narrow ledges of the moſt dangerous precipices. Cloaths made of their ſkins are very warm. The fat upon their haunches is equal to that of the deer, and the fleſh is a moſt delicious food. Of the horns they make ladles, ſpoons, and other ſmall utenſils; and the horn entire they carry upon the road at their girdles, and uſe it for a bottle.

136 There are three kinds of rats; the firſt of which is of a brown colour, as large as the greateſt houſe-rats in *Europe*: but their cry is very different, reſembling the ſqueaking of pigs; otherwiſe they are very like our common rats. Of the ſecond kind there are but few, and theſe in the houſes, where they run about without fear, and live upon any offals. The third ſort have a diſpoſition ſomewhat like the drones among bees, laying up no manner of proviſion, but ſtealing their food from the firſt kind, which live in the fields, woods, and high mountains, in great numbers.

237 thoſe made of timber, in that they are much lighter and go
262 ſwifter. Of the ſeals' fat both *Ruſſians* and *Kamtſchadales* make
— candles; and beſides the natives eſteem it ſuch a delicacy that
251 they can have no feaſt without it. The fleſh they boil or dry in the ſun; but if there are great quantities, they ſmoke or bake it in the following manner: They dig a large pit in proportion to the quantity of fleſh or fat, and pave the bottom with ſtones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the aſhes, then lay at the bottom a layer of green poplar wood, upon this another of ſeals' fleſh or fat, each ſeparately; and thus alternately wood and fleſh until the pit be quite full. They then cover it with graſs and earth, to keep in the heat; and after ſome hours they uncover it, take out the fat and fleſh, and lay it up for the winter. Both fleſh and fat thus prepared is much more delicate than what is boiled; beſides, it keeps without ſpoiling for a whole year.

825 When they have picked all the fleſh from the heads of the
796 ſeals they ſhew them all the reſpect that they would to a particular friend that viſits them. I ſaw this ceremony in the
782 year 1740 at the little fort of *Krodakighe*, which ſtands upon a river of the ſame name that falls into the Eaſtern Ocean. It was performed in the following manner: They brought in the ſkull or head of a ſeal, bound round with the ſweet graſs, and placed it upon the floor. Then a *Kamtſchadale* entered with a bag filled with the ſweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtſchadales* rolled in a great ſtone, and ſet it oppoſite to the entry of the hut, about which they laid ſeveral ſtones; and two others tore the ſweet herb, and made it into ſmall bunches. The great ſtone was to ſignify the ſea, the ſmaller the waves, and the bunches of the ſweet herb the ſeals. This being done, they took three diſhes of caviar mixed with kipre, hurtleberries, and ſeals'

fat

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 136 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

There is likewiſe another creature in theſe ſeas reſembling a whale, but ſmaller and ſlenderer: the *Ruſſians* call it a wolf, and the *Kamtſchadales*, chethak. Its fat is of ſuch a nature, that, when ſwallowed, it preſently paſſes inſenſibly. The natives ſometimes uſe it as a medicine in caſe of coſtiveneſs, but oftener to play tricks with one another. They feed upon the fleſh and tongue, which have not the ſame quality.

Notwithſtanding the great plenty of whales upon this coaſt, the ſcarcity of food is ſometimes ſo great, that whole villages die of hunger. In the month of *April*, 1739, I ſaw a melancholy inſtance of their being obliged, out of neceſſity, to eat ſome poiſonous whale's fat, at a village upon the river *Beroſover*, called *Alaune*, where I obſerved the people all look pale, as if they had been ſick for a long time; when I aſked the reaſon, I was told, that juſt before my arrival one of the natives was killed by eating of whale's fat; and as all the reſt had eat of the ſame, they dreaded the ſame fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the phyſicians there, faſtened him with ropes to a ladder, and placed themſelves on both ſides of him with great clubs in their hands, with which they toſſed firebrands out of the huts, and the wife of the ſick perſon coming behind him, made ſeveral conjurations over his head, begging death to ſpare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly ſurpriſe me; I rather wondered that ſuch things did not happen oftener, eſpecially from thoſe whales which are killed with poiſoned darts. However the *Kamtſchadales* think ſo little of the conſequences, that they had rather riſk their lives than be deprived of the pleaſure of eating whale's fat.

After the whales, we muſt mention the fiſh * mokoe, which at *Archangel* is called akula. It is about three fathoms long;

* Canis Carcharias Autoris.

brings

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 brings forth its young alive, like the whale; and when its mouth is ſhut has ſome reſemblance of a ſturgeon, but its teeth are very different, being large and terrible. The *Kamtſ-*
262 *chadales* eat the fleſh of this fiſh, and though it appears to
825 be tough and ſtrong, they ſay it is exceedingly well taſted. The guts, and particularly the bladder, are in high eſteem; ſo that when they catch this fiſh, they never call it by its name, for fear, as they imagine, they ſhould provoke it to burſt its bladder, and render it uſeleſs to them. The teeth are ſold under the name of ſerpents' teeth.

136 Several fiſhes which are common to other ſeas are found here;
262 as pike, eels, lampreys, cod, and very fine ſoals in great plenty;
231 but the inhabitants make no account of theſe fiſh, and never uſe them unleſs in great neceſſity, or to feed their dogs. Mr. *Steller* obſerved four different ſpecies of flat fiſh.

There is a fiſh called * vahnae, which is a ſpecies of the cod; is round and thick, with three fins upon its back; and when taken out of the water is of a copper-colour, but preſently changes to yellow: its fleſh is white, but ſoft, and of a diſagreeable taſte; however the inhabitants eat more of it, than of other fiſh which are much better taſted; the reaſon indeed is, that they catch this fiſh in the beginning of the ſpring, when they can catch no other; a great deal of which they dry in the ſun uncleaned, deſigning it as proviſion for their dogs.

136 I ſaw the fiſh which they call † terpuk, but it being dry, I could not obſerve thoſe fine colours which Mr. *Steller* deſcribes. By his deſcription its back is blackiſh, its ſides are reddiſh, and chequered with fine ſilver-coloured ſpots; ſome of which are ſquare, and others circular: in its ſhape it reſembles the perch.

1. [Mokoe or Canis Carcharius Autorum]

* Onos vel Aſinus Antiquorum.

† Dorcogrammos Stelleri.

They

They angle for this fish near the *Kurilski* islands, and the haven of *Awatscha*, with hooks made of bone or wood. 136

There are likewise several other kinds of fishes in these seas which are not very common in other places; but as they make no part of their nourishment, and are seldom caught, I shall take no notice of them, my design being only to mention such as serve for food to the inhabitants, in this country which produces no grain. The chief of these are salmon of different kinds, which during the summer come in shoals from the sea up the rivers. Of these they make what they call *eukol*, which they use instead of bread; and they boil up the fat, which serves for butter. They likewise make glue of them. 136 262 237

Before I give a particular description of each species apart, I would communicate some observations which regard the catching of these fish, and which indeed are wonderful proofs of the Divine Providence and the goodness of the Creator, who has blest a place with such abundance of fish where there is neither cattle nor grain. 136

In *Kamtschatka* the fish come from the sea in such numbers, that they stop the course of the rivers, and cause them to overflow the banks; and when the waters fall there remains a surprising quantity of dead fish upon the shore, which produces an intolerable stink. At this time the bears and dogs catch more fish with their paws than people do at other places with their nets. All the fish that swim up the rivers are of the salmon kind, and are commonly called red fish; but the several sorts are so distinct from each other, that *Kamtschatka* alone is thought to produce as many different species as are to be found in all the world besides. Not one fish remains in *Kamtschatka* longer than six months (except gudgeons); for all that are not caught before the end of *December* die, except in some few deep places where there are warm springs. It is observed of all the different species of

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught. /136 825 805

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled. /136

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe. /136 226 262

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not /136

136 to be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn
262 about the thickness of sugar ropes; and the fishing begins about
576 the middle of *May*, and lasts six weeks. The *Kamtschadales*
574 esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about
136 the middle of *June*. The *eukol* that is made of it, though very
226 pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the shoals appear at the mouths. The second is, that this fish is more plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into these rivers that communicate with the lakes. Here the inhabitants catch them by nets, dams, or other methods.

1. [chivatsi]

The

The third kind of this fish is called keta or kaeko; which is somewhat larger than the narka. The flesh is white; the head flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *eukol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas. 136 262

The gorbushe, or crook back, follows or sometimes accompanies the keta. This fish is more plentiful than any other whatever; it is about eighteen inches long, and flattish; its flesh is white; its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs. 136 262 231

The last of these kinds that come on shore is called white fish. This fish both in bulk and appearance is very like the keta; they differ in this indeed, that the keta has no spots, and the white fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have spawned, they take all care to provide for their own safety, retiring immediately to deep places where there are warm springs; and they are chiefly found in the springs near the *Bolscheretskoi* river 136 225 226 136 226

 and

The fourth ſpecies is the harius, which is well known in *Siberia* and all *Ruſſia*; but thoſe that are here have the back fin longer than the others. Mr. *Steller* writes, that they come up into the rivers upon the firſt going off of the ice; but I never happened to ſee this fiſh in *Kamtſchatka*. 136

There is another ſpecies of red fiſh which reſembles the golſta, with this difference, that its head is larger, and the upper part of the ſnout a little hooked; its ſides are marked with red ſpots, like the malma: it is ſeldom longer than 20 inches.

Among the ſmall fiſhes which the *Kamtſchadales* feed upon are three ſpecies of ſmelts; one of which is called hagatch, the ſecond innaka, and the third uiki. The hagatch is our common ſmelt. The innaka differs from it a little, and is found in great plenty about the lake *Nerpech*. Uiki is thrown ſometimes upon the ſhore in vaſt heaps for 100 verſts together. They are eaſily diſtinguiſhed from the other ſpecies by a rough ſtripe that goes down the ſide. They commonly ſwim three together, and are ſo joined by the afore-mentioned rough ſtripe, that when you catch one the others cannot eaſily diſengage themſelves. The *Kamtſchadales* dry this fiſh as food for their dogs; but in caſe of ſcarcity they uſe it themſelves, although the taſte is very diſagreeable 136 231 262

The laſt kind of fiſh which we ſhall mention is the herring: theſe are found in great plenty in the Eaſtern Sea, but very ſeldom in the bays which lie upon the *Penſchinſka*. In my opinion they don't differ in the leaſt from the herring which we have in Europe; which Mr. *Steller* likewiſe confirms. In the harveſt they are found in large lakes, where they breed and winter: in the ſpring they ſwim towards the ſea. The greateſt fiſhery of them is in the lake *Viliutchin*, which is only about fifty fathom from the ſea, and has communication with it by a ſmall outlet. When theſe herrings enter the lake, this paſſage is ſhut up by the ſand being thrown into it, and remains ſo 'till the month of 136 226

March,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 *March*, when it is washed away again by the high water arising
226 from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other forts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make less use of them than of roots and fishes:
433 the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

CLASS

136 what leſs than the other two; its colour is like that of the ipatka, except that its bill and legs are black, and that there are two white ſprigs upon its forehead, which reach from the eye to the bill.

The aru *, or kara, belongs to this claſs. It is larger than a duck; the head, neck, and back are black; the bill long, ſtrait, black, and ſharp; the legs black with a caſt of red; it has three black toes, and is web-footed. Great numbers of 237 theſe are found upon the rocky iſlands; and the inhabitants kill 262 them for the ſake of their fleſh, though tough and bad taſted; but more ſo for their ſkins, of which, as well as thoſe of other ſea fowls, they make themſelves garments. Their eggs are reckoned a great delicacy.

136 There are two kinds of tchaiki, or cormorants, found upon this coaſt, which are hardly obſerved any where elſe. They are about the bigneſs of a gooſe, have a ſtrait reddiſh bill about five inches long, and ſharp on the edges, and four noſtrils, ſuch as other cormorants have, two being near the forehead as are found in other birds which are thought to prognoſticate ſtorms, and are thence named Procellaria; their heads are of the middling ſize; their eyes black; their tails eight inches long; and their legs are covered with hair to the knees, but below them are bare; they have three toes of a bluiſh colour, and are web-footed; their wings extend more than a fathom; they are ſometimes ſpeckled; they appear often near the ſhore, but can't ſtand ſtrait upon dry ground, their feet being ſo near the tail that they are not able to balance their bodies: they fly ſlow even when hungry, but when full of meat they cannot raiſe themſelves from the ground; and, having eat too much, they eaſe their ſtomachs by throwing it 237 up; they have a wide throat, and ſwallow fiſh whole; their fleſh is very tough and ſinewy, therefore the natives ſeldom eat it, but in great neceſſity, killing them principally for the ſake of their

* Lomvia Hoieri.

bladders,

were black, and others white; but none of them came so near the 136
vessel as to be exactly observed.

The * kaiover, or kaior, a bird of this species, is black, with its bill and feet red; builds its nest, which is very curious, upon high rocks in the sea, and whistles very loud, for which reason the Cossacks call it ivoshik, or post-boy. I never saw this bird.

The fowl † urile, of which there is great plenty in *Kamtschatka*, called, by writers, sea ravens, is about the bigness of a common goose, with a long neck and small head; the feathers upon the whole body are of a bluish black, except upon its thighs, where they are white and in tufts; there are also some long white feathers like hairs, here and there upon its neck; it has a red membrane or skin round the eyes, a strait bill, black above and reddish below; and its feet are black and webbed: when it swims it holds up its head, but flying, it stretches it out like a crane; it flies swift, but rises heavily; and feeds upon fish, which it swallows whole: in the night time, these fowls stand in rows upon the edges of the cliffs, from which in their sleep they frequently fall into the water; where they are caught by the stone 136
foxes, who watch for them; they breed in the month of *July*; 222
their eggs are green, about the bigness of a hen's egg, and 223
being boiled thicken a little, but are ill tasted; however the *Kamtschadales* climb the highest rocks in search of them, at the hazard of their lives. They catch them with nets, and in the evening with nooses fastened to a long pole; and these crea- 252
tures are so void of apprehension, that, though they see the 262
next fowl to themselves taken away, they will sit still and receive the noose, 'till they are all taken off the cliff; their flesh is hard and sinewy; but the natives prepare it in

* Columba Groënlandica Batavorum. STELL.

† Corvus aquaticus maximus crista periophtalmiis cinnabarinis, postea candidis. STELL.

much.

252 ſuch a manner that, as victuals are there, it is not bad; they
262 roaſt it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roaſted, they ſkin and eat it.

825 The natives ſay that theſe birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noiſe to the ſound of a trumpet.

136 223 CLASS II. *Of thoſe Birds which haunt for the moſt part about the freſh Water.*

The firſt of this claſs is the ſwan, which is ſo common in *Kamtſchatka*, both in ſummer and winter, that the pooreſt perſon can have no entertainment without a ſwan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in thoſe rivers that do not freeze.

136 Here are ſeven kinds of geeſe, which are diſtinguiſhed thus: large grey geeſe, gumenniki, ſhort necks, grey and ſpeckled, white necks, ſmall white geeſe, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr: *Steller* ſays; who likewiſe writes, that they come from *America*, and that he himſelf ſaw them paſs *Bering*'s iſland in great flocks, flying eaſt in the harveſt and weſt in the ſpring. In *Kamtſchatka* are principally found the large grey geeſe, the gumenniki, and the grey and ſpeckled; the ſmall white gooſe is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vaſt numbers of them; and the beſt down
223 is brought to *Jakutſki* from theſe places. They catch them at the time they caſt their feathers, in the following manner:— They build huts with two doors, near thoſe places where they moſt commonly ſit at night. The fowler putting a white ſhirt on, above his cloaths, ſteals as near the flock as he can; and ſhewing himſelf

1 [Urile, Corvus aquaticus maximus Cristatus periophtalmiis Cinnaberinis, postea Candidis. Stell.]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tunguſi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkovoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kurilſki* languages.

221 462 ſledges, and other uſes. The women at this time are buſy with their hemp of nettles, in pulling it up, watering, breaking, peeling, and laying it up in their balagans.

The men in the winter hunt for ſables and foxes, weave fiſhing nets, make ſledges, fetch wood, and bring their proviſions from ſeveral places, which they had prepared in the ſummer, and could not bring home in the harveſt. The women are principally employed in ſpinning thread for nets.

In the ſpring, when the rivers begin to thaw, the fiſh that wintered in them go towards the ſea; and the men are buſied in catching them or the ſea animals that at this time frequent the bays. The people upon the Eaſtern Ocean catch the ſea beaver. 462 All the women go into the fields, where they gather wild garlick, 221 and other young tender herbs, which they uſe not only in a ſcarcity of other proviſion, which often happens at this ſeaſon of the 262 year, but likewiſe out of luxury; for ſo fond are they of every thing that is green, that during the whole ſpring they are ſeldom without having ſome of it in their mouths; and though they always bring home a great bundle of greens, they ſeldom laſt them above a day.

462 Beſides the above-mentioned employments the men are obliged to build their huts and balagans, to heat their huts, dreſs victuals, feed their dogs, flea the animals, whoſe ſkins are uſed in cloathing, and provide all houſhold and warlike inſtruments: the women are here the only taylors and ſhoemakers, for they dreſs the ſkins, make the cloaths, ſhoes, and ſtockings: it is even a diſgrace for the men to do any thing of that ſort; ſo that they looked upon the *Ruſſians* who came here firſt in a very ridiculous light, when they ſaw them uſe either their needle or awl. The women are likewiſe employed in dying ſkins, in conjuration, and 281 curing of the ſick. Their method of preparing and dying ſkins, ſewing and joining them, is as follows: every ſkin which they uſe

CHAP. VIII.

Of their DIET *and* LIQUORS, *together with their Method of* COOKING. 262

HAVING already mentioned that the food of the *Kamtſchadales* conſiſts in roots, fiſh, and ſea animals, which are all deſcribed in the ſecond part of this book, we ſhall now relate their method of dreſſing them. And firſt, we will begin with the fiſh, which they uſe inſtead of bread. The principal food, called *yokola*, is prepared from every ſort of fiſh, and ſerves them for houſhold bread. They divide their fiſh into ſix parts; the ſides and tail are hung up to dry; the back and thinner part of the belly are prepared apart, and generally dried over the fire; the head is laid to ſour in pits, and then they eat it like ſalt fiſh, and eſteem it much, though the ſtink is ſuch that a ſtranger cannot bear it; the ribs and the fleſh which remain upon them they hang up and dry, and afterwards pound them for uſe; the larger bones they likewiſe dry for food for their dogs: in this manner all theſe different people prepare the *yokola*, and they eat it for the moſt part dry. 252 262

Their ſecond favourite food is caviar, or the roes of fiſh, which they prepare in three different ways: they dry the roe whole in the air, or take it out of the skin which envelopes it, and, ſpreading it upon a bed of graſs, dry it before the fire; or laſtly, make rolls of it with the leaves of graſs, which they alſo dry. They never take a journey or go a hunting without dry caviar; and if a *Kamtſchadale* has a pound of this, he can ſubſiſt without any other proviſion a great while; for every birch and alder tree furniſhes him with bark, which, with his 262

262 dried caviar, makes him an agreeable meal; but they cannot eat either separately, for the caviar sticks like glue to the teeth, and the bark, although it should be chewed ever so long by itself, they are hardly ever able to swallow down alone. There is still 252 a fourth method which both the *Kamtschadales* and *Koreki* use 171 in preparing their caviar; having covered the bottom of a pit with grass, they throw the fresh caviar into it, and leave it there to grow sour: the *Koreki* tie their's in bags and leave it to sour; this is esteemed their most delicate dish.

252 There is a third sort of diet, called by the *Kamtschadales* 262 *tchupriki*, which is prepared in this manner: in their huts over the fire-place they make a bridge of stakes, upon which they lay a heap of fish, which remains there 'till the hut becomes as warm as a bagnio; if there was no great thickness of fish one fire would serve to dress it; but sometimes they are obliged to make two, three, or more fires. Fish dressed in this manner is half roasted, half smoaked, and has a very agreeable taste, and may be reckoned the best of all the *Kamtschatka* cookery; for the whole juice and fat is prepared with a gradual heat, and kept in by the skin, in which it lies as in a bag, and when ready may be easily separated from the fish; as soon as it is thus dressed, they take out the guts, and spread the body upon a mat to dry; this they afterwards break small and put into bags, carrying it along with them for provision; and when dried eat it like the *yokola*.

252 The *Kamtschadales* have a dish, which they esteem very 262 much, called *huigul:* it is fish laid to grow sour in pits; and 171 though the smell of it is intollerable, yet the *Kamtschadales* esteem it a perfume. This fish sometimes rots so much in the pits that they cannot take it out without ladles; however in that case they use it for feeding their dogs.

Mr. *Steller* says, that the summer *Samojeds* likewise sour their fish; but that the earth being frozen preserves it much better;

better; the *Jakutski* alſo dig deep pits, in which they lay their 252
fiſh, ſprinkling it with wood aſhes, and cover it with leaves at 262
top, and over all put a layer of earth: this method is better 171
than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their 252
troughs, with ſeveral different herbs and roots; the broth they 264
drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, 262
called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink 273
but water: but when they made merry they drank water 177
which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves fre- 271
quently by throwing handfuls of ſnow into their mouths; and 583
the bridegrooms who work with the fathers of their future brides 524
find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

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Of the above localities, Numbers 1 to 12 yielded the following sites:

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SITE 1

On a hill above Salt Lake there were several pits, which could not be noticed at first sight as they were covered with an abundant overgrowth of the shelamainik (*Filipendula kamtschatica* MAX.) and horse-tails (*Equisetum heleocharis* EHRH.) 6 feet high. The staple food of the old Kamchadal fishers consisted of different salmon species, the bones of which in decaying formed an excellent fertiliser for the soil. In my work on the Aleutian archæology I pointed out that no bones of salmon were found in excavations of ancient village sites on the Aleutian Islands, contrary to the statements of Dr. Dall for the Aleutian Islands and Professor Emile Rivière, cited by Professor MacCurdy, concerning finds in a cave near

1. Salt Lake.
2. Bogatyrevskaya Bay.
3. Isthmus above the Salt Lake.
4. Slope of hill on the northeastern side of Bogatyrevskaya Bay.

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Menton, France.[1] In his *Human Origin*, Professor MacCurdy[2] cites Mr. Abbo as having found on a skeleton excavated in Verneau, France, perforated salmon vertebræ, evidently worn as ornaments. It would be interesting to determine whether the vertebræ were really of salmon, and not of some other species of fish. As I have stated, the soft bones of *Salmonoidea*, which ascend rivers and fresh-water lakes for spawning, decay rapidly, falling to pieces in 2 or 3 years.

Professor R. Torii[3] referring to remains of food found in his archæological excavations in Manchuria tells of fish bones, the species of which could not be determined because they were only a heap of powder. These were undoubtedly salmon bones.

[1] Waldemar Jochelson, *Archæological Investigations in Aleutian Islands*, p. 138; W. H. Dall, *On Succession in the Shell Heaps of the Aleutian Islands*, Contributions to North American Ethnology, vol. 1, Washington, 1877, pp. 41-91; G. G. MacCurdy, *The Field of Paleolithic Art*, American Anthropologist, vol. 26, No. 1, Jan.-Mar., 1924, p. 41.

[2] George Grant MacCurdy, *Human Origins*, vol. 1, p. 302.

[3] R. Torii, *Populations Préhistoriques de la Mandchourie Méridionale*, Jour. College of Science, Tokyo Imperial University, 1913-1915, vol. XXXVI, Art. 8, p. 48.

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 291 563 or of ſkin without hair; they are made like the parque, and anſwer the ſame purpoſe, that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 462 222 The principal food of theſe people conſiſts, as I have already obſerved, in dried fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamtſchadales

7:Lesseps T-3 (1787-88)1790 Kamchadal

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ſchadales and Ruſſians of this country. When the women go out to make theſe harveſts for winter conſumption, it is high holyday with them, and the anniverſary is celebrated by a riotous and intemperate joy, that frequently gives riſe to the moſt extravagant and indecent ſcenes. They diſperſe in crouds through the country, ſinging and giving themſelves up to all the abſurdities which their imagination ſuggeſts; no conſideration of fear or modeſty reſtrains them. I cannot better deſcribe their licentious frenzy than by comparing it with the bacchanals of the Pagans. Ill betide the man whom chance conducts and delivers into their hands! however reſolute or however active he may be, it is impoſſible to evade the fate that awaits him; and it is ſeldom that he eſcapes, without receiving a ſevere flagellation.

Their proviſions are prepared nearly in the

7:Lesseps T-3 (1787-88)1790 Kamchadal

THEIR PROVISIONS ARE PREPARED NEARLY IN
252 the following manner; it will appear, from
262 the recital, that they cannot be accuſed of much delicacy. They are particularly careful to waſte no part of the fiſh. As ſoon as it is caught they tear out the gills, which they immediately ſuck with extreme gratification. By another refinement of ſenſuality or gluttony, they cut off alſo at the ſame time ſome ſlices of the fiſh, which they devour with equal avidity, covered as they are with clots of blood. The fiſh is then gutted, and the entrails reſerved for their dogs. The reſt is prepared and dried; when they eat it either boiled, roaſted, or broiled, but moſt commonly raw.

The food which the epicures eſteem moſt, and which appeared to me to be ſingularly diſguſting, is a ſpecies of ſalmon, called *tchaouitcha*. As ſoon as it is caught, they bury it in a hole; and in this kind of larder they leave it till it has had time to ſour, or, properly

252 properly ſpeaking, become perfectly pu-
262 trified. It is only in this ſtate of corruption that it attains the flavour moſt pleaſing to the delicate palates of theſe people. In my opinion the infectious odour that exhales from this fiſh, would ſuffice to repulſe the moſt hungry being; and yet a Kamtſchadale feeds voluptuouſly upon this rotten fleſh. How fortunate does he conſider himſelf when the head falls to his lot! this is deemed the moſt delicious morſel, and is commonly diſtributed into many parts. I frequently wiſhed to overcome my averſion, and taſte this ſo highly valued food; but my reſolution was unequal to it; and I was not only unable to taſte it, but even to bring it near my mouth; every time I attempted, the fetid exhalation which it emitted gave me a nauſea, and diſguſted me inſuperably.

262 The moſt common fiſh in Kamtſchatka
372 are trouts, and ſalmon of different ſpecies;

ſea

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 sea wolves are also eaten; the fat of this fish
372 is very wholesome, and serves them beside for lamp oil.

136 Among the vegetables which are made
252 use of by the Kamtschadales, the principal
262 are *sarana* root, wild garlic, *slatkaïa-trava*, or sweet herb, and other plants and fruits nearly similar to what are found in Russia.

The *sarana* is known to botanists*. Its shape, its size, and its colour have been described at large in the third voyage of captain Cook. Its farinaceous root serves instead of bread†. It is dried before it is

* By the name of *lilium flore atro rubente.*

† The Cossacs use rye also, which makes a sort of black bread, like that of the Russian peasants. Government allows them a certain quantity of rye flour, but it is insufficient, and they are obliged to procure more at their own expence. Some of them lay it up in store in order to profit by its future sale.

used;

7:Lesseps T-3 (1787-88)1790 Kamchadal

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uſed; but it is wholeſome and nouriſhing in whatever mode it may be prepared.

From the wild garlic* they make a harſh and fermented beverage, which has a very unpleaſant taſte; it is alſo uſed in various ſauces; the Kamtſchadales are very fond of it.

The ſlatkaïa-trava, or ſweet herb, is pleaſant enough when it is freſh. This plant† has alſo been minutely deſcribed by the Engliſh. It is highly eſteemed by the natives, particularly the ſpirit diſtilled from it. Soon after it is gathered, they ſlit it in two, and ſcrape out the pith with a muſcle-ſhell: they then dry it for winter, and

* It is called in Kamtſchatka, *tſcheremſcha*. Gmelin denominates it: *allium foliis radicalibus petiolatis, floribus umbellatis*. Vol. 1. p. 49.

† *Spondilium foliolis pinnatifidis*. See Linn. The juice of the rind of this plant is ſo acrid, that it is impoſſible to touch it without bliſtering the hand. In gathering it they take care to wear gloves.

when

224 foxes, otters, beavers, ſables, hares*, &c.
261 but they have not the ſame dangers to encounter; ſometimes they make uſe of ſnares, conſtructed of wood or iron, leſs than thoſe which are ſet for bears, and reſembling in their ſimplicity our pitfalls; no other attention is neceſſary than that of viſiting them from time to time. The Kamtſchadales ſometimes lie in ambuſh, armed in the manner I have deſcribed; and the only hardſhip they experience reſults from their proviſion being exhauſted in conſequence of the long duration of their chace. They frequently ſubmit to ſuffer hunger for many days together, rather than quit their ſtations till they have obtained the end of their purſuit; but they amply repay themſelves for this faſting, by immediately devouring the fleſh of the animals †, and by the plea-

* Theſe animals are all deſcribed in Cook's voyage.

262 † The fleſh of bears, argali, and rain-deer, is conſidered by them as very wholeſome, the laſt particularly; I frequently feaſted upon it.

ſure

18: Yarmolinsky--7 L-4 (no date) 1947 Kamchadal
252, 262

" A native dish regarded as a dainty, which is made by pounding fat with several ingredients, including berries and the roots of sarana [Polygonum viviparum]. 'The tolkusha prepared with reindeer fat tastes well,' writes Jochelson in one of the unpublished studies mentioned above, 'but one cannot say the same of tolkusha with seal's fat.'"

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 136 501 We crossed the river in two dug-out canoes lashed together. These boats are as a rule small, and without attempt at elegance in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most part, but with a centre channel about seven feet deep. It appeared 226 to be teeming with salmon. Stari-ostrog, situated on the right 251 bank, consists of ten huts and a large number of fish-drying sheds. 262 The long Kamschatkan winters, during which it is difficult to 361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

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of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

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If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

136 eastern form of the Pied Wagtail (Kittlitz's *Motacilla lugens*) was extremely numerous; the Yellow Wagtail much less so. But of all the land birds the Kamschatkan Marsh Tit (*P. kamschatkensis*) was at this part of the river by far the most abundant. For two or three days we saw them in flocks of from fifty to a couple of hundred individuals, streaming northward along the bank from tree to tree.

133 Shortly after mid-day we passed the mouth of a river joining the Kamschatka on the right bank. The natives knew it as the Kojerevska. It is a stream of some size, being apparently of considerable depth, and having a breadth of forty yards at its junction with the main stream. As far as we could gather, it drains the opposing slopes of the Tolbatchinska and Kojerevska volcanoes.

We reached the little hamlet of Kojerevsky at nightfall. The distance from Tolbatchik, the scene of the last rows we had had with the natives, is only ninety-one versts instead of two hundred, and we might with perfect justice have reduced our payment to half of the sum we had promised. But, to tell the truth, we had become so wearied of the endless wranglings in which we had been involved in all our dealings with these wretched people that we paid them without a word. It was better to let them think that they had deceived us than for them to imagine that we had weakly yielded to what we knew to be an imposition. We were 262/144 pleased to find that the Kojerevskans exhibited strong evidences of their Kamschatdale descent. We were received by the head-man, a little brown fellow with bright eyes; and under his direction the people did everything in their power to help us, carrying up our baggage, bringing us wood, and altogether showing us an amount of civility that was as new to us as it was agreeable. They provided us with wild cherries, cranberries, potatoes, turnips, milk, cream, and butter, and last, but by no means least, with a loaf of coarse rye bread, which, we heard, had been specially prepared for the Kluchi pope, who had been expected to pay the settlement a visit.

136 Since leaving Kluchi we had spent a good deal of time in trying to obtain a specimen of Pallas's Northern Sea Eagle (*Thalassaëtus pelagicus*)—a species which, at this part of the river, is by no means uncommon. It is a magnificent bird, and is especially conspicuous from the large white shoulder-patches and tail, but owing to its shyness it is extremely difficult to approach. We were, unfortunately, not provided with a rook rifle, and the few long shots we obtained were unsuccessful. Once only did we get a bird fairly within shot, and the two barrels of No. 2 that he received at a distance of thirty yards seemed to have no effect whatever upon him. This eagle appears to be chiefly confined to the lower part of the Kamschatka River, for we did not meet with it before reaching the neighbourhood of the great volcanoes.

226 252 262 The natives are prevented by law from barring the river in the lower part of its course, and here the salmon are taken chiefly with seine and drift nets. The V-shaped curral-trap of stakes, with baskets on the lobster-pot principle, is also frequently seen; a system which, as I have already stated, is used to bar the river right across at Melcova. The fat of the Kisuchi salmon is regarded as a great delicacy, and is prepared in considerable quantities at this season. A canoe is filled with water, and a number of the fish placed in it. Into this large red-hot stones are dropped, thus boiling the contents, which are meanwhile constantly stirred. The fat is then removed as it rises to the surface.

133 224 The low and muddy shores of the river in this part of its course are in many places intersected with small creeks, at the mouths of which two tall poles may often be noticed. These are used for taking ducks at flight time, by a plan which is not uncommon in other parts of the world. A fine net is hung between the two poles, which the hunter lets fall as the birds fly against it. By this means we were told that large numbers are often caught.

000 We woke on the morning of September 15th to a most miser-

24: Lansdell-639 M-2 (1879) 1882 Kamchadal
116, 157, 262, 574, 576

" The Kamchatdales are a people of much amiability and honesty. Their houses are always open to the stranger, whom they never weary of waiting upon, and from whom they soon forget an injury. (1)

1. Their hospitality is carried even to excess. They visit one another, for instance, during a month or six weeks, until the generous host, finding his stock exhausted, gives the hint by serving up a dish called 'tolkootha', a hodge-podge, composed of meat, fish, and vegetables; upon which the guests depart the following day."

24: Lansdell-645-646 M-2 (1879) 1882 Kamchadal
116, 137, 177, 226, 241, 262

" In certain valleys, especially in those of Kamchatka, the grass exceeds the height of a man, and the Russian settlers make hay three times a year. The culture of cereals is of little profit; oats thrive best. Hemp has been grown, but not in sufficient quantities to replace the nettle as a textile thread. In fact, gardening has succeeded better than agriculture, and now the natives cultivate in hundreds of gardens cabbages, potatoes, beetroot, turnips, carrots, and other vegetables introduced by the Russians in the last century. All these, however, added to their other kinds of food, barely give sustenance enough to the Kamchatdales and their dogs, without which it would be almost impossible for them to leave their huts, at certain times of the year. During the four months of summer they must lay up dry fish to provide for eight months of winter, and the normal amount of winter food for a pack of half-a-dozen Kamchatdale dogs is 100,000 herrings. Besides [646] this the owner's family must be nourished, and hence, if a bad season comes, and the fishing or hunting fails, death is certain; for to the greater part of the natives who have no deer, winter and want are synonymous terms."

28: Sarytschew--66-67 T-1 (1789-90) 1806 Kamchadal
116, 222, 262, 609, 825

"On our journey we experienced the most friendly treatment from the Kamtschadales, who not only entertained us with the utmost cordiality, but made us liberal presents of partridges, fresh fish, frozen keta, jukol, berries, and roots, [67] which are collected in great quantities from the mouse-holes, and form one of their principal aliments.

In autumn, they go into the fields in search of these roots, and as soon as they find hollow ground, by stamping, they dig down, and lay open the store-rooms of these animals. They do not, however, empty them entirely, but leave the mice a third at least of their provision, probably with a view of not driving away such useful creatures. They terrify each other, indeed, with the saying, that the mouse which is deprived of all its sustenance, will hang itself in despair on the next tree; a tale which may perhaps have originated in the circumstance of a mouse having been entangled by accident in the branches of a tree, and having hung there till it died."

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of scrofula is become hereditary. In this part of the peninsula the chase is scarce, and the inhabitants mostly subsist upon fish, a few mountain sheep, and wild rein-deer, being the only meat they taste from one end of the year to the other. The situation is fine and highly productive in fish, but at this moment there are not a sufficiency of people to transact the ordinary business; a circumstance which calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous country, which is more than compensated by the succeeding richness of a valley eighteen miles in length. I crossed several times the Bistra, a rapid stream, uniting with the Bolshaya Reka, and was again obliged to become pilot, chief, and dog-master; however, I managed very well, and arrived early. Malka is deserving of little notice, yet is said to be celebrated for its baths! The situation is magnificently grand; the hospital stands in the bosom of a lofty chain of elevated mountains at two miles from the village. I was welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2 (1821-22) 824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

29:Cochrane T-2 (1821-22)1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is absolutely necessary. 177 The *Russians* were no sooner settled there, than they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. 137 The stem is fleshy, of three or four joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inhabitants gather and prepare it in this manner: they cut off the 222 252 stalks of the leaves which grow nearest the root, and with a shell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

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142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

better; the *Jakutski* also dig deep pits, in which they lay their fish, sprinkling it with wood ashes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tungusi* and Cossacks of *Ochotska* preserve their fish in the same manner, with this difference only, that instead of wood ashes, they use the ashes of burnt sea weed. They boil their fresh fish in troughs, take it out with boards, and letting it cool, eat it with a soup made of the sweet grass.

As for the flesh of land and sea animals, they boil it in their troughs, with several different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and sea horse fat they also boil with roots.

There is a principal dish at all their feasts and entertainments, called *selaga*, which they make by pounding all sorts of different roots and berries, with the addition of caviar, and whale and seals' fat.

Before the conquest they seldom used any thing for drink but water: but when they made merry they drank water which had stood some time upon mushroons; but of this hereafter. At present they drink spirits as fast as the *Russians*: after dinner they drink water; and every one, when he goes to bed at night, sets a vessel of water by him, to which he puts snow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuse themselves frequently by throwing handfuls of snow into their mouths; and the bridegrooms who work with the fathers of their future brides find it their hardest task to provide snow for their family in the summer time, for they must bring it from the highest hills be the weather what it will, otherwise they would so disoblige as never to be forgiven.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

better; the *Jakutski* alſo dig deep pits, in which they lay their fiſh, ſprinkling it with wood aſhes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their troughs, with ſeveral different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

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226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

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and broths, but in all their superstitious ceremonies this is absolutely necessary. The *Russians* were no sooner settled there, than 177
they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. The stem is fleshy, of three or four 137
joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inha- 222
bitants gather and prepare it in this manner: they cut off the 252
stalks of the leaves which grow nearest the root, and with a shell

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

222 252 ſcrape off the ſkin; and then bind up ten ſtalks together. When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 252 The women, when they gather this,[1] muſt wear gloves; for the juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 556 The manner of diſtilling ſpirits from it is as follows:—They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.]

is only the richer ſort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. Linn. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliis pinnatifidis Linn. Cliff.

boil

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

better; the *Jakutski* alſo dig deep pits, in which they lay their fiſh, ſprinkling it with wood aſhes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their troughs, with ſeveral different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink but water: but when they made merry they drank water which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves frequently by throwing handfuls of ſnow into their mouths; and the bridegrooms who work with the fathers of their future brides find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

people, it has been perverted by foolish and ridiculous ceremonies; and this appears the more probable, because that, after their summer or harvest labour is over, they look upon it as a sin to do any work, or make any visits, before this holiday, which if any one neglects he is obliged to expiate it at that time, if not before. From hence we may see that the ancestors of this people were accustomed to offer up the first fruits of their summer labours to God, and to make merry with one another. The northern and southern *Kamtschadales* have different ceremonies in the celebration of their holidays, which are extremely silly, and consist of many ridiculous anticks. I shall give a slight sketch of one of these assemblies in the southern *Kamtschatka*.

After many strange ceremonies they introduce a little bird and a fish, which they roast upon the coals, and divide amongst them, when every one throws his share into the fire as a sacrifice, or an offering, to those spirits which come to their feasts; then they boil dried fish, the broth of which they pour out before their image, and eat the fish themselves; and then take the birch-tree out of the hut, and carrying it to their magazines, lay it up there to be kept for the whole year. Thus ends the festival.

CHAP. XIV.

Of their FEASTS *and* DIVERSIONS.

THEY make feasts when one village entertains another, either upon the account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of opanga, 'till they are all set a vomiting;

273 ing; ſometimes they uſe a liquor made of a large muſhroon, with which the *Ruſſians* kill flies. This they prepare with the juice of epilobium, or *French* willow.

The firſt ſymptom of a man's being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad, according to his peculiar conſtitution. Some jump, dance, and ſing; others weep, and are in terrible agonies, a ſmall hole appearing to them as a great pit, and a ſpoonful of water as a lake: but this is to be underſtood of thoſe who uſe it to exceſs; for taken in a ſmall quantity it raiſes their ſpirits, and makes them briſk, courageous, and chearful.

276 It is obſerved, whenever they have eaten of this plant, they
824 maintain that, whatever fooliſh things they did, they only obeyed
828 the commands of the muſhroon: however, the uſe of it is certainly ſo dangerous, that unleſs they were well looked after it would be the deſtruction of numbers of them. The *Kamtſchadales* do not much care to relate theſe drunken frolicks, and perhaps the continual uſe of it renders it leſs dangerous to them. One of our Coſſacks reſolved to eat of this muſhroon in order to ſurpriſe his comrades; and this he actually did, but it was with great difficulty they preſerved his life. Another of the inhabitants of *Kamtſchatka*, by the uſe of this muſhroon, imagined that he was upon the brink of hell ready to be thrown in, and that the muſhroon ordered him to fall upon his knees, and make a full confeſſion of all the ſins he could remember, which he did before a great number of his comrades, to their no ſmall diverſion. It is related, that a ſoldier of the garriſon having eaten a little of this muſhroon, walked a great way without any fatigue, but at laſt, having taken too great
276 a quantity, he died. My interpreter drank ſome of this juice without knowing of it, and became ſo mad, that it was with difficulty that we kept him from ripping open his

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 provifions fent from Okotfk, and convey them from the mouth of the Bolchaïa-reka to Bolcheretfk. The reft of the inhabitants are compofed of merchants and failors.

563 437 273 Thefe people, Ruffians and Coffacs, together with a mixed breed found among them, carry on a clandeftine commerce, fometimes in one article, and fometimes in another; it varies as often as they fee any reafon for changing it; but it is never with a view of enriching themfelves by honeft means. Their induftry is a continual knavifhnefs; it is folely employed in cheating the poor Kamtfchadales, whofe credulity and infuperable propenfity to drunkennefs, leave them entirely at the mercy of thefe dangerous plunderers. Like our mountebanks, and other knaves of this kind, they go from village to village to inveigle the too filly natives: they propofe to fell them brandy, which they artfully prefent to them

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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to taste. It is almost impossible for a Kamtschadale, male or female, to refuse this offer. The first essay is followed by many others; presently their heads become affected, they are intoxicated, and the craft of the tempters succeed. No sooner are they arrived to a state of inebriety, than these pilferers know how to obtain from them the barter of their most valuable effects, that is, their whole stock of furs, frequently the fruit of the labour of a whole season, which was to enable them to pay their tribute to the crown, and procure perhaps subsistance for a whole family. But no consideration can stop a Kamtschadale drunkard; every thing is forgotten, every thing is sacrificed to the gratification of his appetite, and the momentary pleasure of swallowing a few glasses of brandy*, reduces

* This is well known to be the ruling passion of all the people of the north; but I have had more than one occasion to observe, that the Kamtschadales are inferior in this respect

437 duces him to the utmoſt wretchedneſs.
273 Nor is it poſſible for the moſt painful expe-
563 rience to put them on their guard againſt their own weakneſs, or the cunning perfidy of theſe traders, who in their turn drink,

reſpect to none of them. The following ſtory, among others, was told me, that I might be able to judge of the rapacity of theſe vagabond traders, and the ſtupid prodigality of their dupes.

A Kamtſchadale had given a ſable for a glaſs of brandy. Inflamed with a deſire of drinking another, he invited the ſeller into his houſe. The merchant thanked him, but ſaid he was in a hurry. The Kamtſchadale renewed his ſolicitations, and propoſed a ſecond bargain: he prevailed.—" Come, another glaſs for this ſable, it is a finer " one than the firſt.—No; I muſt keep the reſt of my " brandy; I have promiſed to ſell it at ſuch a place, and I " muſt be gone.—Stay a moment; here are two ſables.— " Tis all in vain.—Well, come, I will add another.— " Agreed, drink." Meanwhile the three ſables are ſeized, and the hypocrite makes a freſh pretence to come away: his hoſt redoubles his importunities to retain him, and demands a third glaſs: further refuſals and further offers: the higher the chapman raiſes his price, the more the Kamtſchadale is prodigal of his furs. Who would have ſuppoſed that it would have ended in the ſacrifice of ſeven moſt beautiful ſables for this laſt glaſs! they were all he had.

7:Lesseps T-3 (1787-88)1790 Kamchadal

273 in like manner, all the profits of their
437 knavery.

273 I ſhall terminate the article of commerce
435 by adding, that the perſons who deal moſt
439 in wholeſale, are merely agents of the merchants of Totma, Vologda, Grand Uſtiug, and different towns of Siberia, or the factors of other opulent traders, who extend even to this diſtant country their commercial ſpeculations.

All the wares and proviſions, which neceſſity obliges them to purchaſe from the magazines, are ſold exceſſively dear, and at about ten times the current price at Moſcow. A *vedro** of French brandy coſts eighty roubles†. The merchants are al-

* A Ruſſian meaſure containing from fifteen to twenty quarts.

† Eighteen pounds ſterling, eſtimating the rouble at four ſhillings and ſixpence.

lowed

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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lowed to traffic in this article; but the brandy, diſtilled from corn, which is brought from Okotſk, and that produced by the country, which is diſtilled from the *ſlatkaia-trava*, or ſweet herb, are ſold, upon government account, at forty one roubles ninety-ſix kopecks* the vedro. They can be ſold only in the *kabacs*, or public houſes, opened for that purpoſe. At Okotſk, the price of brandy diſtilled from corn is no more than eighteen roubles the vedro; ſo that the expence of freight is charged at twenty-three roubles ninety-ſix kopecks, which appears exorbitant, and enables us to form ſome judgment of the accruing profit.

The reſt of the merchandize conſiſts of nankins and other China ſtuffs, together with various commodities of Ruſſian and foreign manufacture, as ribands, handker-

* Nine pounds nine ſhillings.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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used; but it is wholesome and nourishing in whatever mode it may be prepared.

From the wild garlic* they make a harsh and fermented beverage, which has a very unpleasant taste; it is also used in various sauces; the Kamtschadales are very fond of it.

The slatkaïa-trava, or sweet herb, is pleasant enough when it is fresh. This plant† has also been minutely described by the English. It is highly esteemed by the natives, particularly the spirit distilled from it. Soon after it is gathered, they slit it in two, and scrape out the pith with a muscle-shell: they then dry it for winter, and

* It is called in Kamtschatka, *tscheremscha*. Gmelin denominates it: *allium foliis radicalibus petiolatis, floribus umbellatis*. Vol. 1. p. 49.

† *Sponditium foliolis pinnatifidis*. See Linn. The juice of the rind of this plant is so acrid, that it is impossible to touch it without blistering the hand. In gathering it they take care to wear gloves.

when

7:Lesseps T-3 (1787-88)1790 Kamchadal

252 439 273 when they use it in their ragouts, it is previously boiled. Brandy is also distilled from this sweet herb, which, as I observed before, is sold on account of government: for this purpose the plant is purchased of the Kamtschadales*.

162 563 There are three sorts of inhabitants, the natives or Kamtschadales, the Russians and Cossacs, and the descendants from intermarriages.

The indigenes, that is, those whose blood is unmixed, are few in number; the small pox has carried off three fourths of them, and the few that are left are dispersed through the different ostrogs of the peninsula; in Bolcheretsk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is sure to be extremely agitated during the night, and to feel the next day as melancholy and restless as if he had committed some crime.

The

22: Guillemard T-2 (1882) 1886 Kamchadal

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for the skins varies very much if these be sold separately. But generally the season's catch is disposed of *en masse*, and a fixed price paid per head, whether good, bad, or indifferent. By far the greater part of the trade lies in the hands of the individual I have alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

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In St. Petersburg the price of a single sable-skin ranges from £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in goods. He is wise if he does so, and can keep clear of the brandy, which, in spite of the law which forbids its sale anywhere but in Petropaulovsky, has proved the ruin of so many of his countrymen.

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The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

27: Sauer--308-309 T-2 (1789-93) 1802 Kamchadal
116, 157, 273

"They are an honest and hospitable race of men, extremely fond of music and of brandy. One of them, who constantly accompanied me in my aquatic excursions, and expended every farthing of his money in brandy, I one day saw coming to my habitation; and, to tempt him, I hid myself in an adjoining [309] room, leaving a glass of brandy upon the table, and a bottle half full close to it, with some sea-biscuit. He came in, saw nobody, and called me, but obtained no answer. Upon which he advanced to the table, and smelt to the glass: 'It is brandy,' said he, 'but I will not drink; and the bottle 'half full; well, I won't taste you; but I'll go and seek master, and scold him for leaving 'you in this manner. I'll just smell again, and go.'--I stepped out of window into the garden, and went to meet him: when he accosted me in the following manner: 'I have 'been into your room and saw a glass full of brandy; perhaps you won't believe me, but 'indeed I did not taste it.' -- 'I dare say you did.'--'No, by G--, I did not: I knew you 'would not believe me; but a Kamtshadal will never take anything without permission.' --'Well, I must believe you; will you come and drink it?'--'Yes, that I will; but I 'wanted to scold you for leaving it so.' "

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

27: Sauer--312 T-2 (1789-93) 1802 Kamchadal
116, 273

"French brandy is now regarded as an article of trade; and a spurious sort is carried about the villages of the natives, who are very fond of it, and pay for it at the rate of one ruble per glass."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

273 Another great cause of this ravage in population
435 has arisen from the introduction of spirits: a Kamt-
563 chatdale will sell his last sable or fox for a glass
733 of it, though he is not physically strong enough to drink any thing of the kind. When it is considered that sixteen thousand bottles of this trash are consumed in the short period of three or four months by six or seven hundred people, we may well feel pity and surprise—pity for the poor women and children, and surprise at the means of getting either the money or sables. Such a quantity of spirit ought to sell for fifty thousand roubles, which is one hundred per cent. upon the price at Okotsk, but it is in reality sold for twice that sum. When it is recollected that officers, soldiers, sailors, merchants, and priests travel round the Peninsula for the purposes of trade, it will be less wonderful when I assert that each bottle of spirits sold to the Kamtchatdales, produces the value of ten and twelve shillings. Now allowing half the quantity imported (eight thousand bottles) to be consumed by the aborigines, this would produce from eighty to one hundred thousand roubles, while the cost is, in Okotsk, only twenty-five thousand. I have seen a bottle of spirits sold for a sable, and afterwards, when the party was drunk, a bottle of adulterated liquor has fetched the same price: in short, I have seen three and even four sables given for two bottles of spirits.

Allowing seven hundred and fifty families of the

29:Cochrane T-2 (1821-22)1824 Kamchadal

273 Koriaks and Kamtchatdales, which is five to each
435 family, and that half the quantity of imported spi-
733 rit is consumed by them, it will appear that each family consumes at least twelve bottles in four months. By this plan the poor purchaser is drunk for days together, and for the rest of the year can get nothing to cheer him under his depression. The cost of that spirit to the Kamtchatdales is one hundred and fifty or two hundred roubles, a prodigious sum for a poor family to expend upon an article so pernicious in its moral and physical effects. Such a sum of money in Kamtchatka would produce near six or eight hundred pounds weight of flour; enough to support a small family during a whole year: or, such a sum would enable them to purchase proper clothing, culinary utensils, nets, twine, tobacco, axes, and knives. The evil of these grog-shops is carried to so ruinous an extent, that the children of the natives are left for three and four days without any food, save yukola, dried fish, doled out to them one or twice within that time. I have known instances of mothers and children being left without any means of support, in consequence of the retailing of such trash being allowed. The yukola and the bark of trees is, in such cases, almost the only nourishment the women and children can procure for several days. If they happen to be possessed of a cow, they are considered very fortunate. It needs little philosophy to prove that it is only by taking care of the rising

29:Cochrane T-2 (1821-22)1824 Kamchadal

273 generation that the stock itself can be preserved,
435 which will not long be possible, if spirit continue
563 to be transported and retailed out as it now is.—
R While making these reflections in England, I am
177 aware that the Russian Government have desisted
.27 from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

651 The abuses arising from the collection of the
661 yasack are most cruel. The yasack itself is incon-
R siderable, but from the arbitrary manner in which
177 it is collected, it is rendered odious and oppressive.
.65 The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

273 ing; ſometimes they uſe a liquor made of a large muſhroon, with which the *Ruſſians* kill flies. This they prepare with the juice of epilobium, or *French* willow.

The firſt ſymptom of a man's being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad, according to his peculiar conſtitution. Some jump, dance, and ſing; others weep, and are in terrible agonies, a ſmall hole appearing to them as a great pit, and a ſpoonful of water as a lake: but this is to be underſtood of thoſe who uſe it to exceſs; for taken in a ſmall quantity it raiſes their ſpirits, and makes them briſk, courageous, and chearful.

276 It is obſerved, whenever they have eaten of this plant, they
824 maintain that, whatever fooliſh things they did, they only obeyed
828 the commands of the muſhroon: however, the uſe of it is certainly ſo dangerous, that unleſs they were well looked after it would be the deſtruction of numbers of them. The *Kamtſchadales* do not much care to relate theſe drunken frolicks, and perhaps the continual uſe of it renders it leſs dangerous to them. One of our Coſſacks reſolved to eat of this muſhroon in order to ſurpriſe his comrades; and this he actually did, but it was with great difficulty they preſerved his life. Another of the inhabitants of *Kamtſchatka*, by the uſe of this muſhroon, imagined that he was upon the brink of hell ready to be thrown in, and that the muſhroon ordered him to fall upon his knees, and make a full confeſſion of all the ſins he could remember, which he did before a great number of his comrades, to their no ſmall diverſion. It is related, that a ſoldier of the garriſon having eaten a little of this muſhroon, walked a great way without any fatigue, but at laſt, having taken too great
276 a quantity, he died. My interpreter drank ſome of this juice without knowing of it, and became ſo mad, that it was with difficulty that we kept him from ripping open his

his belly, being, as he ſaid, ordered to do it by the muſhroon. 276

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten. 276 439

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms. 535

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune. 533 534

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick 536 532

 for

for their diverſion in all their entertainments.

535 to quiet him. In ſpite of the praiſes that were laviſhed upon the talents of theſe actors, the ſcene, I confeſs, afforded me no amuſement, but on the contrary, conſiderable diſguſt

276 All the inhabitants of this place, women as well as men, ſmoke and chew tobacco. By a refinement that I cannot account for, they mix aſhes with the tobacco to make it ſtronger. We gave them ſome ſnuff, and they applied it not to their noſe, but to their mouth. I examined their pipes: they are of the ſame ſhape as thoſe of the Chineſe, made of bone, and very ſmall. When they make uſe of them, they do not emit the ſmoke from their mouth, but ſwallow it with great gratification.

000 All the toyons of the different oſtrogs we had paſſed in coming from Ozernoi, out of reſpect to M. Kaſloff, had eſcorted us as far

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-1-2
116, 177, 276, 789

"Notwithstanding the Kamtschadales have renounced most of their former superstitions, they still retain a firm belief in the supernatural powers of the schamans. A Kosak once profited by this credulity to regain his stolen property in a very ingenious manner. While on a journey with several Kamtschadales, he had some of his tobacco stolen from him, and, after questioning every individual separately, he was unable to discover who was the thief. He accordingly took some sticks, and making them of equal lengths, gave each of them one, with the assurance, that the stick of the thief would infallibly grow longer by the [68] power of schamanary. This unpleasant intelligence had such an effect on the imagination of the thief, that he actually conceited that his stick did increase in length, and thought to relieve himself from this dilemma by breaking a piece off. The next morning, every Kamtschadale carrying back his stick, the thief was instantly discovered. He was now obliged to confess the theft, and make restoration. His apology was, that all his own tobacco being gone, he had no money to buy more, and could not dispense with this necessary. Tobacco was remarkably dear at that time in Kamtschatka, a single pound costing a hundred rubles; and yet the inhabitants of this place sacrificed every thing to the indulgence of their passion for this intoxicating herb. Its ordinary price on a fresh supply is only two rubles and a half.

Tobacco is one of the most lucrative branches of trade in these parts, and always finds a ready sale; for there is not a tribe or nation having any intercourse with the Russians, which does not smoke, chew, and take snuff. The Burats, Jakuts, Koraks,

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-2
116, 177, 276, 789

Jakugirens, and Tschukschens, like the strong Tscherkapian tobacco, and are not fond of that which grows in the country of Irkutsk. They smoke it with a mixture of half saw-dust; but the Kamtschadales and Aleutians only chew tobacco and take snuff."

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

135 phur which they bring from *Olontoſki*, where it drops from the rocks, is quite fine and pellucid; and in the *Pyrites* upon the coaſt it is to be found every where.

The following kinds of earth are common. Great quantities of white chalk are found about the *Kuriſky* lake; tripoly and oker about the Great River, and the villages of *Nachikin* and *Koutchinubiff*; and a purple-coloured earth about the hot ſprings, 135 and ſometimes a hard ſtony oker. Among the ſtones in the 324 mountains are found, but rarely, ſmall cherry-coloured chryſtals; and near the river *Charious* are found pieces of fluſſe, which is like a coarſe green glaſs, of which the inhabitants formerly made knives, axes, lancets, and darts. It is called by the *Ruſſian* natives glaſs, and by the *Kamtſchadales*, *nanagy*. This fluſſe is alſo found in the copper mines about *Ecatherinenbourg*, where it is called a topaz. There is likewiſe here a ſort of light ſtone, white like chalk, of which the inhabitants make plates, and lamps wherein they burn their fiſh oil; and every where upon the ſhore is found an iron-coloured hard ſtone, porous as a ſpunge, and eaſily turned by the fire.

The inhabitants find pellucid ſtones near the ſprings of the river, which they uſe inſtead of flints. Some of theſe ſtones are ſemi-pellucid, whitiſh and milky, and reckoned cornelians by the *Ruſſians*. Some ſmall pellucid ſtones of a yellowiſh colour, like corals, are found upon the banks of ſeveral rivers; and plenty of hyacinths near *Tomſkoy*.

135 Hitherto they have diſcovered no precious ſtones here. The hills 278 are firmer than thoſe in *Siberia*, and do not fall away like them; but when the earth falls off they find much *lac lunæ*; and a ſoft kind of bolus, of a fattiſh creamy taſte, is found near the *Penſchinſka* ſea, *Kurilſkoy* lake, and the *Olutorſkoy*: this is uſed as an excellent remedy in fluxes. I ſent ſpecimens of 135 moſt of the above things to the Muſeum of the Imperial Academy of *St. Peterſbourg*. I muſt not forget to mention that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
846 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

137 Amongst the medicinal plants we must mention the fol-
278 lowing: 1st, Kailoun, a plant which grows in all the swamps near the rivers. The inhabitants use this as a cataplasm in all boils to make them suppurate; and taken in decoctions, they imagine it produces sweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtschatka*, they use in decoctions for all pains and swellings of the legs. 3dly, Katunatch †, or wild rosemary, is not so strong as in other parts. The inhabitants have thought it beneficial in the venereal disease, but in this are deceived. 4thly, The sea oak ‖ is thrown out by the waves; and being boiled with the sweet herb, a decoction of it is given in fluxes. 5thly, The sea rasberry is given to women in labour, to promote the birth. 6thly, There is yet another sea plant, called yachanga ‡, which the sea throws out near to the *Kurilskaya Lopatka*, resembling the whale's beard. This the inhabitants use in cholic pains, infusing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almost all the shore of
757 *Kamtschatka*. This plant is made use of against pains in the back in the following manner:---They put the patient into a hut made exceedingly warm; and when he begins to sweat profusely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occasion sudden death: however from this practice they
137 generally obtain great relief. 8thly, The zgate †† must not
278 be omitted, whose dreadful qualities are but too well known
411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is squeezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venosis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

There is likewise another creature in these seas resembling a whale, but smaller and slenderer: the *Russians* call it a wolf, and the *Kamtschadales*, chethak. Its fat is of such a nature, that, when swallowed, it presently passes insensibly. The natives sometimes use it as a medicine in case of costiveness, but oftener to play tricks with one another. They feed upon the flesh and tongue, which have not the same quality. 136 278 262 522

Notwithstanding the great plenty of whales upon this coast, the scarcity of food is sometimes so great, that whole villages die of hunger. In the month of *April*, 1739, I saw a melancholy instance of their being obliged, out of necessity, to eat some poisonous whale's fat, at a village upon the river *Berosover*, called *Alaune*, where I observed the people all look pale, as if they had been sick for a long time; when I asked the reason, I was told, that just before my arrival one of the natives was killed by eating of whale's fat; and as all the rest had eat of the same, they dreaded the same fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the physicians there, fastened him with ropes to a ladder, and placed themselves on both sides of him with great clubs in their hands, with which they tossed firebrands out of the huts, and the wife of the sick person coming behind him, made several conjurations over his head, begging death to spare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly surprise me; I rather wondered that such things did not happen oftener, especially from those whales which are killed with poisoned darts. However the *Kamtschadales* think so little of the consequences, that they had rather risk their lives than be deprived of the pleasure of eating whale's fat. 262 755 278

After the whales, we must mention the fish * mokoe, which at *Archangel* is called akula. It is about three fathoms long; 136

* Canis Carcharias Autoris.

brings

757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 757 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 244 278 The women uſe ſea raſberries ‡ to haſten their delivery; and alſo a ſort of coral, which they make into powder like crab-eyes, in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Empetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

decoction of the pentaphylladis fruticosus, and that not without success. To wounds they apply the bark of the cedar, and with this they pretend they can even extract arrows.

In costiveness they likewise drink the broth of their stinking fish, and in fluxes they eat lac lunæ, which is very common in this country. For the same distemper they likewise use meadow-sweet and tormentilla root.

Those who have sore throats use a decoction of the epilobium, which is also used by women in hard labours. When they are bit by a dog, or wolf, they lay the bruised leaves of the ulmaria upon the wound, drinking at the same time a decoction of them: this decoction they also admininister in the belly-ach and scurvy. The leaves and stalks bruised they use in burns. The decoction of this herb mixed with fish they use also in the tooth-ach; they hold it warm in their mouths, and lay a piece of the root upon the affected tooth. They use a species of gentian in the scurvy, and almost against every disorder. In the *French* disease they apply the chamaenchododendros, but seldom to any advantage: in fluxes they use the quercus marina: in swellings of the legs and scurvy, they drink a decoction of the dryas; and procure sleep by eating the seed of the ephedra. They foment their eyes with a decoction of seramus.

The inhabitants of the *Lopatka* use clysters, which probably they learned from the *Kuriles*: they prepare them from a decoction of different herbs, sometimes with fat and sometimes without: this they put into a seal's bladder, fastening to it any pipe which they can procure, and apply it in the common way: this medicine is in high esteem among them, and used in most distempers.

In the jaundice, they have a medicine, which they look upon as infallible. They take the roots of the iris sylvestris, and after cleaning them, beat them in warm water, and apply the juice, which they squeeze out, as a clyster, continuing it for

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

757 two days three times a day: this produces a purging, and ge-
771 nerally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the loins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

764 THE burial of the dead, if one can call throwing them
775 to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corps, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

7: Lesseps T-3 (1787-88)1790 Kamchadal

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The ſmall pox, whoſe ravages I have already mentioned, appears not to be natural to the country, nor is it very common. Since the invaſion of the Ruſſians, and the frequent emigrations that ſucceeded it, this epidemical diſeaſe has only made its appearance in 1767 and 1768. It was then brought into the country by a Ruſſian veſſel bound to the Eaſtern iſlands, for the purpoſe of hunting otters, foxes, and other animals. The perſon, who had in his blood the fatal germ, was a ſailor from Okotſk, where he had taken remedies for the diſorder, previous to his departure; but the recent marks of it were viſible. Scarcely landed, he communicated this cruel malady to the poor Kamtſchadales, which carried off three fourths of them. As it has not appeared ſince, it is ſuppoſed that theſe people are not ſubject to it. In the year 1720 it broke out in the northern part of Kamtſchatka, but it did not ſpread ſo far as the peninſula.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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757

peninſula. It began at Anadirſkoi; it is not known how it was brought there, though the Ruſſians are alſo accuſed in this inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed births. Such as are deformed among them, have become ſo in conſequence of a conſiderable fall, though this is not a very common occurrence, as they are accuſtomed to fall from their balagans. They are but

 little

7:Lesseps T-3 (1787-88)1790 Kamchadal

844 these occasions they make use of their hair,
862 I am told, to tie the umbilical cord, carry home their children themselves, and immediately give them suck. They have no limited time for suckling their children, and I have seen instances of its continuing for four or five years. We may judge from this circumstance of the strong constitution of these women. It is observed, however, that Kamtschadales of either sex, do not live longer than Russians.

278 I forgot to mention a remedy to which
825 the inhabitants of this peninsula have voluntary recourse in almost every disease: it is to a root called *bears root*, which they steep in brandy. The name sufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himself upon it when wounded, they imagined it to possess some healing quality, and this

7:Lesseps T-3 (1787-88)1790 Kamchadal

278 825 this induced them to make uſe of it. This animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177 771 793 The Chriſtian religion was introduced into this country by the Ruſſians; but the inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

17: Heizer--421 E-3 (no date)1943 Kamchadal-1-4
116, 225, 278

"Steller [CMC: G.W. Steller. Beschreibung von dem Lande Kamtschatka. Frankfurt and Leipzig] (1774, pp. 98, 103, ftn. (a)) has left the best description of Kamchadal whaling: (2)

2. The accounts of Asiatic whaling by Tooke[CMC: W. Tooke, View of the Russian Empire during the Reign of Catherine the Second and to the Close of the Eighteenth Century, 3 vols. Dublin] (1801, vol. 3, pp.18-20) and Krashenninikov[CMC: S. P. Krashenninikov. The History of Kamtschatka and the Kurilski Islands, with the countries adjacent, James Grieve. Gloucester](1764, pp. 138-139) are similar to Steller's fuller description, which I offer here in translation from the German edition.

Whales are also taken in the neighborhood of Kamtschatka in the number of ways which I shall cite here, however inconceivable such seem and are astonishing in view of(the size of) these great sea animals. Around Lapatka (3) and the

3. Cape Lopatka, the southernmost tip of the Kamchatka Peninsula.

Kurile Islands the inhabitants travel into the sea in baidars, (4) seek places at

4. This word ordinarily refers to skin-covered boats; here it means wooden boats with dugout hulls and built-up side planks (cf. Torii, [CMC: R. Torii. Les Ainous des Iles Kouriles. Journ. Coll. Sci. Tokyo Imperial University, vol. 42] 1919, pp. 178-183).

which these are accustomed to sleep; as many animals as they meet, so many do they shoot with poisoned arrows, whereby they suddenly puff out (become animated?) storm and rage frightfully and go (down) into (sound) the sea, and it happens now and then, that one or more, at times even none of them, are cast upon the shore. When the Kuriles obrain a whale, (5) no one begins to cut it up until all are

5. Presumably this refers to the moment when the whale, previously attacked, has come ashore as already described by Steller.

assembled; first shamanizing takes place, each one puts on his best clothes, and carries home his portion, after this one yurt entertains the other. Before and after the entertainment they give their dance, and otherwise delight themselves in all sorts

of ways, which will be treated in what follows.

As soon as a whale comes to the land in Kamchatka, they fasten it with a thin line to a little stick stuck in the sand, and believe certainly on this account, that neither the spirits nor the sea nor Gamuti, or spirits of the land, can any longer have any claim to it.

Further descriptions of the Kamchadal whale fishery are passing references, (6) or

6. Steller, 1774, pp. 100, 103, ftn (a); Krashenninikov, 1764, p. 141. Von Langsdorff [CMC: G.H. von Langsdorff, Voyages and Travels in Various parts of the World, during the years 1803...1807, London] (1813, p. 262) and Petroff [CMC: Ivan Petroff. Report on the Population, Industries and Resources of Alaska. U.S. Department of the Interior, Bureau of the Census](1884, p. 146) deny Kamchadal whaling. By Von Langsdorff's time the practice may have been forgotten.

are seemingly traceable to Steller's original account.

Whaling in the Kurile Islands between Yezo and the Kamchatka peninsula is recorded, but not described adequately. Krashenninikov says (1764, p. 138; see also Steller,

1774, p. 98) the 'Kuriles (kill whales) by throwing poison darts into them.' The same author (7) notes that the southern Kurilians (i.e., Ainu) feed on whale'fat. Shelekhoff

7. Krashenninikov, 1764, p. 39. La Pérouse, [CMC: J.F.G. de La Pérouse. A Voyage round the World, performed in the years 1785, 1786, 1787, 1788 by the Boussole and Astrolabe, 2 vols. London] 1799, pp. 59-60, 75. Drift whales cast ashore on Etorup are mentioned in Neue Beschreibung, [CMC: Neue Beschreibing der Kurilischen Inseln, in P.S. Pallas, Neue Nordische Beytrage, vol. II, St. Petersburg and Leipzig] 1782 p. 134.

[CMC: G. Shelekhoff. Voyages of G. Shelekhoff, from the Year 1783 to 1790, St. Petersburg. MS translation by Ivan Petroff in Bancroft Library, University of California, Berkeley](1812, vol. 1, p. 128) states that the Japenese receive whale oil from the Matmai Kuriltze. (8)

8. The Kurile Islands, except the two northernmost opposite Cape Lopatka, were occupied by Ainu. These two northern islands, Paramushir and Shumshiri, were inhabited by Kamchadal. There are a few slight indications that others of the Kurile Islands may have been occupied by Kanchadal, or, at any rate, strongly culturally influenced from Kamchatka."

17: Heizer--445 E-3 (no date) 1943 Kamchadal-1-2
116, 225, 278

"Steller (1774, pp. 235-236, ftn.a) says of the southern Kamchadal, [CMC: The following quote from Steller given in German in the text: 'Nonetheless such were very much feared because they (i.e. the Kamchadal) poisoned them by gluing on powder from the root of the Napelli (Aconitum napellus?) which in Russian is called Ludik.]Shelekhoff (75) says, ' Paramushir Island has a plant called Liutik, with the roots of which the na-

75. Shelekhoff, 1812, vol.1, p. 90. Neue Beschreibung...1782, p. 118. Paramushir was occupied by Kamchadal. In fact, at least the two northernmost islands of the Kurile chain (Paramushir and Sumshiri), and perhaps still others, were not held by Ainu, but by Kamchadal. This implies Ainu-Kamchadal contacts and probable cultural interchange. We know, for example, they both hunted whales in the same manner.

tives paint themselves and into its juice they dip the points of their arrows, to kill animals.'Krashenninikov's statement (1764, p. 42) about 'poisonous herbs, whose roots are as yellow as saffron and as thick as rhubarb, and are well known to the inhabitants of the first Kurilskoy island...' may refer to the same plant. Lewin(76)identified the

76. Lewin, [CMC: L. Lewin. Die Pfeilgifte. Leipzig.] 1923, pp. 174-175.

'zgate' spoken of by Krashenninikov (77) as Anemone ranunculoides. Thus, there seems

77. Krashenninikov, 1764, pp. 92-93.

to be not a single clear reference to aconite poison from Kamchatka, but of Anemone. There can be little doubt but that this poison extracted from roots is related to the high development in the area to the south and southeast."

221 462 ſledges, and other uſes. The women at this time are busy w... their hemp of nettles, in pulling it up, watering, breaking, peel-ing, and laying it up in their balagans.

The men in the winter hunt for ſables and foxes, weave fiſhing nets, make ſledges, fetch wood, and bring their proviſions from ſeveral places, which they had prepared in the ſummer, and could not bring home in the harveſt. The women are principally employed in ſpinning thread for nets.

In the ſpring, when the rivers begin to thaw, the fiſh that wintered in them go towards the ſea; and the men are buſied in catching them or the ſea animals that at this time frequent the bays. The people upon the Eaſtern Ocean catch the ſea beaver. 462 All the women go into the fields, where they gather wild garlick, 221 and other young tender herbs, which they uſe not only in a ſcarcity of other proviſion, which often happens at this ſeaſon of the 262 year, but likewiſe out of luxury; for ſo fond are they of every thing that is green, that during the whole ſpring they are ſeldom without having ſome of it in their mouths; and though they always bring home a great bundle of greens, they ſeldom laſt them above a day.

462 Beſides the above-mentioned employments the men are obliged to build their huts and balagans, to heat their huts, dreſs victuals, feed their dogs, flea the animals, whoſe ſkins are uſed in cloathing, and provide all houſhold and warlike inſtruments: the women are here the only taylors and ſhoemakers, for they dreſs the ſkins, make the cloaths, ſhoes, and ſtockings: it is even a diſgrace for the men to do any thing of that ſort; ſo that they looked upon the *Ruſſians* who came here firſt in a very ridiculous light, when they ſaw them uſe either their needle or awl. The women are likewiſe employed in dying ſkins, in conjuration, and 281 curing of the ſick. Their method of preparing and dying ſkins, ſewing and joining them, is as follows: every ſkin which they uſe

use for cloaths, such as deer-skins, seals, dogs, and beavers, they prepare one way: in the first place, wetting and spreading it out, they scrape off all the pieces of fat or veins that remained after flaing it, with stones fixed in pieces of wood; then rubbing it over with fresh or sour caviar, they roll it up and tread it with their feet 'till the hide begins to stink; they again scrape and clean it, and continue this 'till the skin is soft and clean. Such skins as they want to prepare without the hair they use at first in the same manner as above; then hang them in the smoke for a week, and afterwards soak them in warm water to make the hair fall off; at last rubbing them with caviar, by frequent treading and scraping them with stones, they make them clean and soft. 281

They dye the deer and dog skins, which they use for cloathing, with alder bark cut and rubbed very small; but the seal-skins, which they use either for cloathing, shoes, or straps for binding their sledges, they dye in a particular manner: having first cleaned off the hair they make a bag of the skin, and turning the hair side outward they pour into it a strong decoction of alder bark; after it has lain thus sometime, they hang it upon a tree, and beat it with a stick. This operation they repeat 'till the colour is gone quite through the skin; then they rip it open, and stretching it out, dry it in the air; at last they rub it 'till it becomes soft and fit for use. Such skins are not unlike dressed goat-skins: however, *Steller* says that the *Lamushki* have yet a better way of preparing them. These skins they call *mandari*, and they are worth three shillings a-piece. The hair of the seals, with which they ornament their cloaths and shoes, is dyed with the juice of the red wortleberry boiled with alder bark, alum, and lac lunæ; which makes a very bright colour. They used to sew their cloaths and shoes with needles made of bone, and instead of thread they made use of the fibres of the deer, which they split to the size or thickness required. 281 386 294 412 293

They

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 entirely the view of it. The inhabitants of the country, whom I interrogated upon the ſubject, informed me we had juſt paſſed a bay of no very conſiderable width, and that the ſea was covered with ice as far as thirty werſts from the land.

361 At Khaluli, an oſtrog, ſituated upon a river of the ſame name, ſixty ſix werſts from Ouké, and at a ſhort diſtance from the ſea, I found but two yourts and twelve or thirteen balagans; but I had the pleaſure
281 of ſeeing a baidar covered with leather.
501 This boat was about fifteen feet long and four wide; the hull was made of planks tolerably thin, and croſſing each other; a longer and thicker piece of wood ſerved as the keel; the timbers were made faſt with leathern ſtraps; and the whole was covered over with ſeveral ſkins of ſea horſes and large ſea wolves.

7:Lesseps T-3 (1787-88)1790 Kamchadal

281/501 I particularly admired the manner in which these skins were prepared, and the compactness with which they were sewn together, so that the water could not penetrate into the boat. Its shape was somewhat similar to ours, but less round, and therefore less graceful; it converged towards the extremities, so as to terminate in a point, and had a flat bottom. The lightness of the common baidars, which makes them liable to be overturned, doubtless gave rise to this mode of constructing them, by which they acquire more weight. This boat was placed under a shed built on purpose to protect it from the snow. The toyon of Khaluli having given up his yourt to us, we slept in it, being unable to proceed till the next day. The wind had increased since our arrival, and did not abate till the middle of the night.

000 At ten o'clock in the morning we had lost sight

563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.

132/133 The current of the river is rather swift here and at Werchni, and we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281/291 While at Melcova we tried to get some of the reindeer-skin dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

22: Guillemard T-2 (1882) 1886 Kamchadal

281/291 exactly resembling those in use in Lapland,—made of soft leather throughout, the sole included. The toe is slightly turned up, probably to keep the feet in place when in snow-shoes, and the

OUR COSTUME ON THE LOWER KAMSCHATKA.

boot is tightly stuffed with fine hay, which is intended to supply the place of stocking and sole combined. The *kuklanka* is merely a double *parka*, having the fur both outside and inside.

000 On the morning of the 4th September we left Melcova and

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling Cyperoides, which is dressed]

CHAP.

342
283
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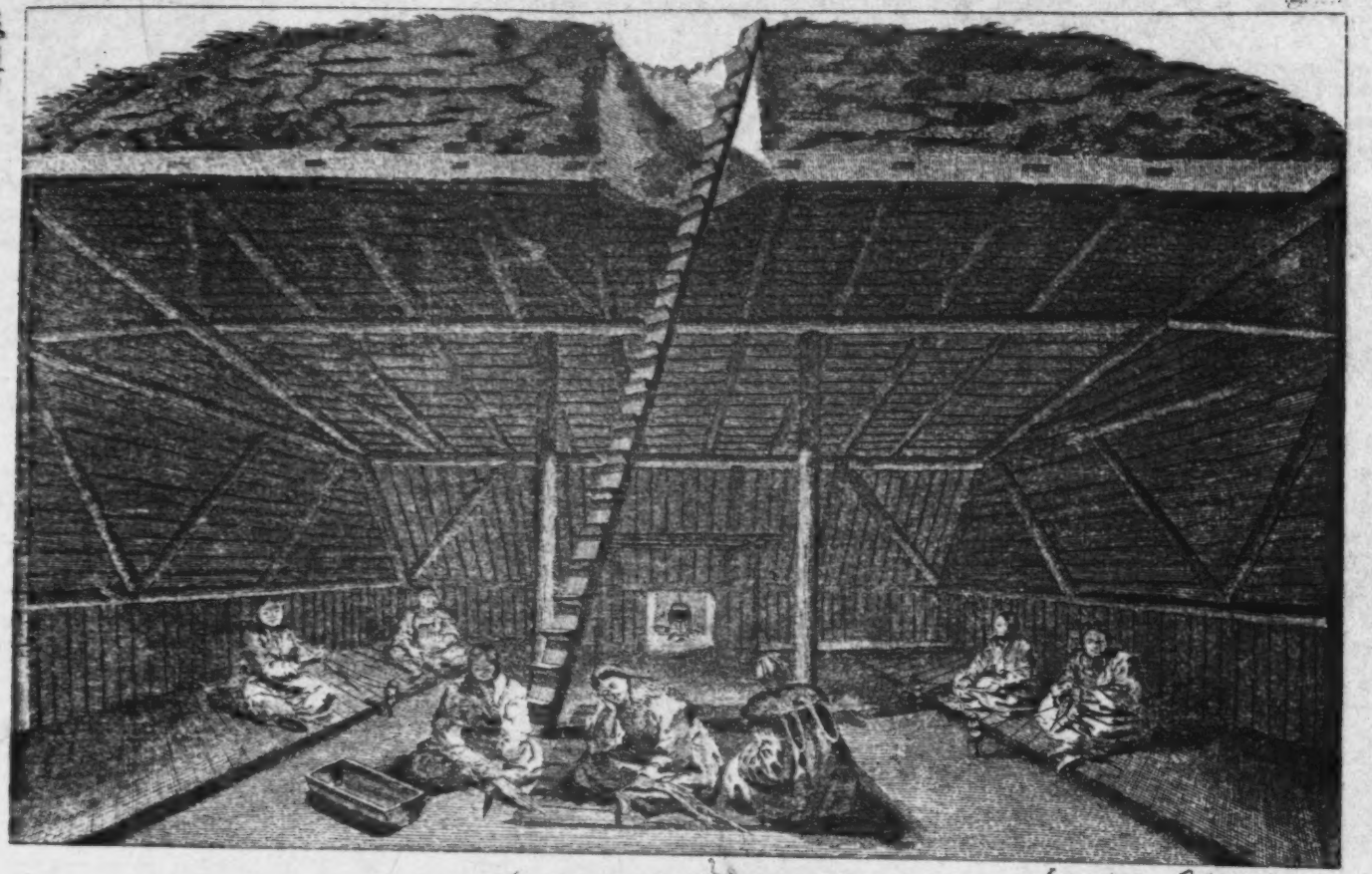

The Inside of a Winter Hut

facing p. 181

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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They

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 314 439 * Their nets are made of pack thread, like ours; they purchaſe it of the Ruſſians: there is another kind however, which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c. than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

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In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 177 several traps, which ſeize them ſometimes by the head, and ſometimes by the foot. The method of killing them with the bow is thus: the hunters muſt know exactly how high to place it; when the bow is bent, it is faſtened to a ſtake driven into the earth near which the fox's tract is obſerved, and then a cord drawn from the bow-ſtring, is ſtretched very tight over his ordinary path; and ſo ſoon as this cord is touched with the foot of the fox, the bow is diſcharged, and the arrow pierces the very heart. Theſe are the inventions of the *Ruſſian* Coſſacks; for formerly the *Kamtſchadales* gave themſelves no trouble about the foxes, not valuing their furrs much more than dogs' ſkins. They pretend they could have killed as many as they wanted with ſticks, and that foxes were formerly ſo numerous in *Kamtſchatka*, that when they fed their dogs, they were obliged to 136 224 drive them away from the trough: and though this may ſeem improbable, yet it is certain, that even now they are in great plenty near the forts, which at night they enter without any ſeeming apprehenſion of danger from the dogs of the country, which either cannot catch them, or, not being bred to it, do not mind them. It happened when I was there, that one of the inhabitants catched ſeveral of them in the pit where they keep their fiſh. The beſt time to hunt foxes is, when the earth is hard frozen, before the ſnow falls, as it is then difficult for them to dig out the rats' neſts, which they do when the earth is thawed, the rats 224 being their chief ſupport. The *Kuriles*, who live upon the 286 *Lopatka*, catch foxes in a manner peculiar to themſelves. They have a net made of the hair of whales' beards, compoſed of ſeveral rings; this is ſpread upon the ground, and to a ring in the middle they bind a magpye; round the net is drawn a cord, the ends of which are held by a perſon concealed in a pit near at hand, who, when the fox ſprings upon the bird, draws the cord and gathers together the net, which ſurrounds the fox as the drag net does a fiſh.

The

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

24: Lansdell-636 M-2 (1879) 1882 Kamchadal
116, 132, 137, 241, 286

" The valley watered by the Kamchatka is composed of fine mould, and has abundant natural productions- fir, birch, larch, poplar, willow, cedar, and juniper, and that of larger size than in the same latitude elsewhere in Asia. Raspberries, strawberries, whortleberries, currants, and cranberries abound; and flowers are seen in spring in almost tropical luxuriance. There is much grass in the lower lands, and Mr. Hill records an extraordinary phenomenon in a place he visited respecting the growth and preservation of potatoes. (1) There grows, likewise, a plant in the country called by

1. Admiral Ricord, a former governor of Kamchatka, imported potatoes for seed, and they were planted, but not taken up the following autumn. The next year, being found abundant and good, they were allowed to remain, where , dying and propagating continually, they yielded more than were locally required. Mr. Hill accounts for the phenomenon by the fact that neither damp nor frost could reach the potatoes; for though in winter the snow covers the surface of the frozen ground, yet so great in this vicinity is the internal volcanic heat that the earth is quite dry, and never frozen below a few inches from the surface.

the natives krapeva, from which they make a coarse but very durable cloth. It resembles our stinging-nettle, but is of larger growth and stronger fibre."

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

3/4 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks [1]his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for expor-
tation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. GMEL.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. LINN.

1 [Original torn. Probably "it worth" rity

but in the old ones it turns grey. The young ones have 136
their hair long, brownish, and very soft. This is the most peaceable of all the sea animals; it never makes any resistance, but endeavours to save itself by flight. The females are very affectionate to their young, and carry such as cannot swim upon their belly between their fore feet; for until the little ones can swim themselves the mother swims upon her back. When the fishermen pursue them, they never quit their young' till the very last extremity; and if they should happen to slip them they presently return to where they hear them cry; so that the fishers endeavour to kill or catch the young, as the most effectual method of taking their dams. They have three different ways of catching 225
them: 1st. By nets placed among the sea cabbage*, whither the beavers retire in the night time, or in storms. 2dly, They chace them in their boats, when the weather is calm, and kill them in the same manner they do sea lions or sea cats. The third method is upon the ice, which in the spring is driven on the coast by the east wind; and this last is so general, that when the ice is driven so strongly upon the shore that the people can pass upon it with snow shoes, they consider it as an acquisition of great treasure, and all the inhabitants upon the coast hunt and kill vast numbers, as they stalk along the ice seeking an opening to get into the water. However, such a drift of ice upon the coast does not happen every year, but when it does, they call it a good year; for the natives, Cossacks, and merchants, find a great advantage from this trade. The *Kuriles* did not 237
esteem the skins of beavers more than those of seals or sea lions 291
before they saw the value that the *Russians* put upon them; and even now they will willingly exchange a dress made of beavers'

* Fucus marinus.

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237
291
136

for a good one made of dogs' ſkins, which they think are warmer, and a better defence againſt the water.

Beſides thoſe already deſcribed, there are ſeveral other ſea animals here, the moſt remarkable of which is the manati, or ſea cow. This animal never comes out upon the ſhore, but always lives in the water; its ſkin is black and thick, like the bark of an old oak, and ſo hard that one can ſcarcely cut it with an ax; its head in proportion to its body is ſmall, and falls off from the neck to the ſnout, which is ſo much bent that the mouth ſeems to lie below; towards the end the ſnout is white and rough, with white whiſkers about nine inches long; it has no teeth, but only two flat white bones, one above, the other below; its noſtrils are near the end of its ſnout, in length and breadth about an inch and a half; they are double, and within are rough and hairy; its eyes are black, placed almoſt in the middle, and near in one line with the noſtrils, they are no larger than ſheep's eyes, which is certainly remarkable in ſuch a monſtrous creature; it has no eyebrows nor eyelaſhes; and its ears are only a ſmall opening; its neck is not eaſily diſcovered, the head and body being ſo nearly joined; however, there are ſome vertebræ proper for turning the head upon, which it actually does, particularly when it feeds, hanging its head like a cow; its body is round like that of a ſeal, being thickeſt about the navel, and growing ſmaller towards the head and tail; the tail is thick, and bent a little towards the end; it ſomething reſembles the beard of the whale, and ſomewhat the fins of a fiſh; its paws, which are under its neck, are about 21 inches long, with them he both ſwims and goes, and by them he takes hold of the rocks, to which he ſometimes faſtens himſelf ſo ſtrongly, that when he is dragged from thence with hooks he will leave the ſkin of his paws behind: it is obſerved that theſe paws are

ſometimes

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

381 They make glue of the dried ſkins of fiſhes, and particularly of the whale-ſkin. A piece of this they wrap up in birch bark, and laying it for a little while in warm aſhes they take it out; and it is then fit for uſe, and to me ſeems as good as the beſt *Yaick* glue.

CHAP. VII.

Of their DRESS.

291 THEIR cloaths, for the moſt part, are made of the ſkins of deer, dogs, ſeveral ſea and land animals, and even of the ſkins of birds, frequently joining thoſe of different animals in the ſame garment. They make the upper garment in two faſhions; ſometimes cutting the ſkirts all of an equal length; and ſometimes leaving them long behind in form of a train. They are made of deer-ſkins, with wide ſleeves of a length to come down below the knee: there is a hood or caul behind, which in bad weather they put over their heads below their caps: the opening above is only large enough to let their head paſs: they ſew the ſkins of dog's feet round this opening, with which they cover their faces in cold ſtormy weather, and round their ſkirts and ſleeves they put a border of white dog-ſkin: upon their backs they ſew the ſmall ſhreds of ſkins or ſilk of different colours. They commonly wear two coats; the under coat with the hair-ſide inwards, the other ſide being dyed with alder; and the upper with the hair outwards. For the upper garment they choose black, white, or ſpeckled ſkins, the hair of which is moſt eſteemed for the beauty of its colours.

Men and women, without diſtinction, uſe the above-mentioned garments, their dreſs only differing in their under cloathing, and in the

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-skin;
what comes round the legs is of dreſſed leather or dyed ſeal-
skins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

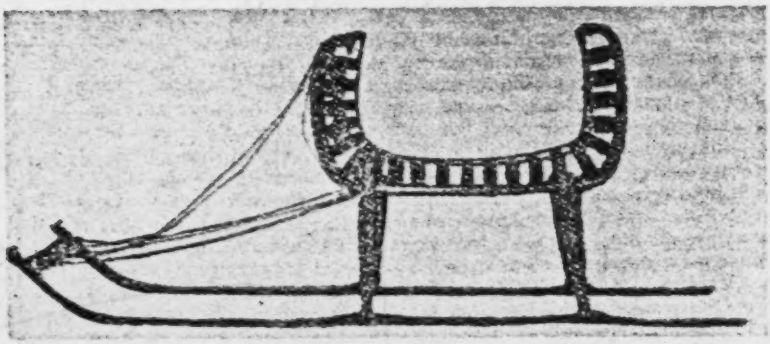
302 they came to be Christians they were with difficulty prevailed upon to quit this dress for one more decent: however, at present round the *Russ* settlements all is intirely changed, the women wearing shirts, ruffles, waistcoats, caps and ribbands; which change nobody now complains of, except the very old people. The women do all their work in mittins: they formerly never washed their faces, but now they use both white and red paint; for white paint they make use of a rotten wood, and for red a sea plant *, which they boil in seals' fat, and rubbing their cheeks with it make them very red. They dress most in the winter time, especially when they either receive or pay visits.

435 The common cloaths for a *Kamtschadale* and his family will not cost him less than an hundred rubles, for the coarsest worsted stockings, which cost in *Russia* 20 kopeeks, cannot be bought here for less than a ruble; and all other things are sold in the same proportion. The *Kuriles* are more able to buy good cloaths than the *Kamtschadales*, for they can purchase for one sea beaver as much as the *Kamtschadales* can for twenty foxes, and one beaver costs the *Kuriles* no more trouble than five foxes do the *Kamtschadales*; for he must be a good hunter who catches more than ten foxes in the winter, and a *Kurili* thinks himself unlucky if he doth not catch three beavers in the season; besides which great numbers are thrown upon the shore by storms,

* Fucus marinus abietis forma. Pinus maritima, seu fucus teres. Dood. Append. 326. Ray Linn.

CHAP.

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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Village, 18th-century engraving.

106
621

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position [554] in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own [614] to anyone." Every village was inhabited by members of one clan. The [342] semidugout housed several related families; the number of its inhabitants [592] sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the [562] husband's moving into the wife's home, or at least temporary residence [591] in the father-in-law's house; marriage by working for the bride, which [583] involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration [182] in the beginning of the 18th century. Constant wars among individual clans [721] and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy [648] and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common [971] with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic [796] cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

177 The inhabitants of Bolcheretſk differ not
291 from the Kamtſcadales in their mode of
563 living; they are leſs ſatisfied, however, with balagans, and their houſes are a little cleaner.

Their clothing is the ſame. The outer garment, which is called *parque*, is like a waggoner's frock, and is made of the ſkins of deer, or other animals, tanned on one ſide. They wear under this long breeches of ſimilar leather, and next the ſkin a very ſhort and tight ſhirt, either of nankin or cotton ſtuff; the women's are of ſilk, which is a luxury among them. Both ſexes wear boots; in ſummer, of goats or dogs ſkins tanned; and in winter, of the ſkins of ſea wolves, or the legs of rein deer *. The men conſtantly wear fur caps; in the mild ſeaſon they put on longer ſhirts of nankin,

439 * Articles of apparel made of the ſkins of rein deer are procured from the Koriacs.

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 or of ſkin without hair; they are made like
291 the parque, and anſwer the ſame purpoſe,
563 that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 The principal food of theſe people con-
462 ſiſts, as I have already obſerved, in dried
222 fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamtſchadales

291 motion which this exercise requires, added to the weight of my Kamtschadale dress, threw me into a violent perspiration, and fatigued me extremely.

My dress merits a particular description; by which it will be seen that it gave me no very alert appearance. Commonly I wore merely a simple parque of deers skin, and a fur cap, which upon occasion would cover my ears and part of my cheeks. When the cold was more piercing, I added to my dress two *kouklanki*, a kind of parque that was larger and made of thicker skin; one of them had the hair on the inside, and the other on the outside. In the severest weather, I put on over all this, another kouklanki, still thicker, made of argali, or dogs skin, the hairy side of which is always undermost, and the leather or external surface of the skin painted red. To these

291 kouklankis a ſmall bib is fixed before, ſo as to guard the face againſt the wind: they have alſo hoods behind, which fall upon the ſhoulders. Sometimes theſe three hoods, one upon another, compoſed my head dreſs, by being drawn over my common cap. My neck was defended by a cravat called ocheinik, made of ſable, or the tail of a fox, and my chin with a chin-cloth made in like manner of ſable, and faſtened upon my head. As the forehead is very ſuſceptible of cold, it was covered with an otter or ſable fillet, and this was covered again by my cap. My fur breeches gave me more warmth than all the reſt of my dreſs, complicated as it was. I had double deer-ſkin ſpatterdaſhes, with hair on both ſides, and which are called in Kamtſchatka *tchigi*. I then put my legs into boots made of deers ſkins, the feet having an interior ſole of *tounchitcha*, a very ſoft graſs, which has the quality of preſerving heat. Notwithſtanding

Lesseps T-3 (1787-88)1790 Kamchadal

291 ing these precautions, my feet, after travelling two or three hours, were very wet, either from perspiration or the gradual penetration of the snow; and if I stood still for a moment in my sledge, they became immediately frozen. At night I took off these spatterdashes, and put on a large pair of fur stockings made of deer or argali skin, and called *ounti*.

000 Notwithstanding my fatigue, I made no stop at Kirgan. A few wersts farther on, I perceived a volcano to the north, which emitted no flame, but a column of very thick smoke ascended from it. I shall have occasion to return this way, and will then speak of it more at large. I observed near Machoure a wood of firs, tolerably bushy, and which was the first I had seen in Kamtschatka. The trees were strait, but very slender. At two o'clock in the afternoon I entered the village of Machoure, which is

7:Lesseps T-3 (1787-88)1790 Kamchadal

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

291 824 854 ſingle deer ſkin, that covers and ſits cloſe to every part of the body, ſo that the children ſeem to be entirely ſewed up. An opening at the bottom, before and behind, affords an opportunity of cleaning them. This opening is covered with another piece of ſkin, which may be faſtened and lifted up at pleaſure; it ſupports a tuft of moſs *, placed like a clout between the legs of the child, and which is renewed as often as it becomes neceſſary. Beſides the common ſleeves, there are two others hanging to the garment to place the arms of the child in when it is cold; the extremities are ſewed up, and the ſleeves lined on the inſide with moſs. There is alſo a hood fitted to it, made of the ſame materials as the reſt of the dreſs; but in yourts the heads of the children are almoſt always bare, and the hood hangs therefore upon their ſhoulders. Beſide all this,

* They make uſe of the herb called *tomchitcha* for the ſame purpoſe.

they

7:Lesseps T-3 (1787-88)1790 Kamchadal

291/854 they have a deer ſkin girt, which ſerves as a ſaſh. The women carry their children on their back by means of a ſtring, which paſſes round the forehead of the mother and under the buttocks of the child.

171/622 The toyon of Karagui, at whoſe houſe we lodged, was an old rebel. It was with ſome difficulty he had been brought back to his duty, and he gave us ſome uneaſineſs by his poſitive refuſal to procure us fiſh.

The manners of the inhabitants of this oſtrog are very ſimilar to thoſe of the neighbouring Koriacs. This analogy is as conſpicuous in their idiom as in the dreſs of their children. I had an opportunity of remarking it the day after our arrival.

Underſtanding that there were two hordes of rein deer Koriacs at no great diſtance, we ſent immediately a meſſenger to them to

requeſt

22: Guillemard T-2 (1882) 1886 Kamchadal

563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.
132 The current of the river is rather swift here and at Werchni, and
133 we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281 While at Melcova we tried to get some of the reindeer-skin
291 dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

22: Guillemard T-2 (1882) 1886 Kamchadal

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exactly resembling those in use in Lapland,—made of soft leather throughout, the sole included. The toe is slightly turned up, probably to keep the feet in place when in snow-shoes, and the

OUR COSTUME ON THE LOWER KAMSCHATKA.

boot is tightly stuffed with fine hay, which is intended to supply the place of stocking and sole combined. The *kuklanka* is merely a double *parka*, having the fur both outside and inside.

000 On the morning of the 4th September we left Melcova and

22: Guillemard T-2 (1882) 1886 Kamchadal

177 Most 1
231
291

of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

164
162
757

If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22)1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters
will be found, who will prefer to administer justice
with clemency and honor, to the degrading of
their characters by a mean and derogatory traffic.
If an increase of rank, double pay and provisions,
an extra pension, and the most unlimited powers
are not sufficient to ensure a just discharge of the
duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

29:Cochrane T-2 (1821-22) 1824 Kamchadal

291 the inhabitants make their parkas and all their warm
237 clothing, which are also exceedingly comfortable
132 and beautiful. The climate of the islands resem-
134 bles that of St. Peter and St. Paul's. The soil is
231 generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

133 The second island, about ninety miles from the
161 first, has seven yourtes, with thirty-five males and
651 forty-two females, paying tribute for itself and
R the fourteenth isle, nominally, thirty-five sea-
177 otters; that is, twenty-three foxes and one hun-
.65 dred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very im-
101 perfectly surveyed. The inhabitants are supposed
197 to be of the same origin as those of Kamtchatka,
302 though they differ in the custom of wearing long
651 beards, which was probably introduced among
R them by the Russians. Their dialect is the same
177 with that of the inhabitants near Cape Lopatka;
.65 from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-ſkin;
what comes round the legs is of dreſſed leather or dyed ſeal-
ſkins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 705

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
445 they are ingenious enough to make ſpears and arrows out of the
R. iron pots and kettles which they buy; and they are ſo dextrous
177 when the eye of a needle breaks as to make a new eye, which
.44 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
439 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kuriſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

use for cloaths, such as deer-skins, seals, dogs, and beavers, they prepare one way: in the first place, wetting and spreading it out, they scrape off all the pieces of fat or veins that remained after flaing it, with stones fixed in pieces of wood; then rubbing it over with fresh or sour caviar, they roll it up and tread it with their feet 'till the hide begins to stink; they again scrape and clean it, and continue this 'till the skin is soft and clean. Such skins as they want to prepare without the hair they use at first in the same manner as above; then hang them in the smoke for a week, and afterwards soak them in warm water to make the hair fall off; at last rubbing them with caviar, by frequent treading and scraping them with stones, they make them clean and soft. 281

They dye the deer and dog skins, which they use for cloathing, with alder bark cut and rubbed very small; but the seal-skins, which they use either for cloathing, shoes, or straps for binding their sledges, they dye in a particular manner: having first cleaned off the hair they make a bag of the skin, and turning the hair side outward they pour into it a strong decoction of alder bark; after it has lain thus sometime, they hang it upon a tree, and beat it with a stick. This operation they repeat 'till the colour is gone quite through the skin; then they rip it open, and stretching it out, dry it in the air; at last they rub it 'till it becomes soft and fit for use. Such skins are not unlike dressed goat-skins: however, *Steller* says that the *Lamuskki* have yet a better way of preparing them. These skins they call *mandari*, and they are worth three shillings a-piece. The hair of the seals, with which they ornament their cloaths and shoes, is dyed with the juice of the red wortleberry boiled with alder bark, alum, and lac lunæ; which makes a very bright colour. They used to sew their cloaths and shoes with needles made of bone, and instead of thread they made use of the fibres of the deer, which they split to the size or thickness required. 281 386 294 412 283

They

Islands of *America*. When they eat, they sit upon their hind 136
legs like a squirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whistle surprisingly loud. No body thinks 1his
while to hunt ermines *, weasels †, or common marmottas ‡,
unless by chance they meet with them; so that one cannot
reckon ermines amongst the furrs of *Kamtschatka*. But there is 825
a creature of the weasel kind, called the glutton ‖, whose furr 237
is so greatly esteemed above all others, that when they would 301
describe a man most richly attired, they say that he is cloathed 291
with the furr of the glutton. The women of *Kamtschatka*
dress their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtschadales* kill
so few of them, that they not only have not enough for exportation, but even import some from *Jakutski* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where else this sort is 435
despised: nay, they esteem it so much, that they say the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or mistresses a greater present than
of one of these skins, which was formerly sold for thirty, and
even sixty rubles; and for the two paws which the women wear
in their hair, they sometimes give one, and sometimes two sea
beavers. The greatest number of these gluttons is found near 136
Karaga, *Andirska*, and *Kolima*. They have a surprising dexterity

* Ermineum majus. Gmel.
† Ermineum minor. Ejusdem.
‡ Marmotta vulgaris. Ejusdem.
‖ Mustella rufo-fusca, medio dorsi nigro. Linn.

1 [Original torn. Probably "it worth"

Nothing plagues the natives in their huts ſo much as the lice and fleas; the women ſuffer moſt from the former, by wearing very long, and ſometimes falſe hair. Mr. *Steller* was told, that near the ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them. 136 515 302

It is remarkable that in *Kamtſchatka* there are neither frogs, toads, nor ſerpents. Lizards, indeed, are numerous enough, which the natives look upon as ſpies ſent from the infernal powers for information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others. 136 825 787

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians'*, their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-ſkin;
what comes round the legs is of dreſſed leather or dyed ſeal-
ſkins: the upper parts are embroidered. Theſe buſkins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 292
formerly mentioned; and theſe were ſo dear to them, that when 177
they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

302 they came to be Christians they were with difficulty prevailed
177 upon to quit this dress for one more decent: however, at present
291 round the *Russ* settlements all is intirely changed, the women wearing shirts, ruffles, waistcoats, caps and ribbands; which change nobody now complains of, except the very old people. The women do all their work in mittins: they formerly never washed their faces, but now they use both white and red paint; for white paint they make use of a rotten wood, and for red a sea plant *, which they boil in seals' fat, and rubbing their cheeks with it make them very red. They dress most in the winter time, especially when they either receive or pay visits.

435 The common cloaths for a *Kamtschadale* and his family will not cost him less than an hundred rubles, for the coarsest worsted stockings, which cost in *Russia* 20 kopeeks, cannot be bought here for less than a ruble; and all other things are sold in the same proportion. The *Kuriles* are more able to buy good cloaths than the *Kamtschadales*, for they can purchase for one sea beaver as much as the *Kamtschadales* can for twenty foxes, and one beaver costs the *Kuriles* no more trouble than five foxes do the *Kamtschadales*; for he must be a good hunter who catches more than ten foxes in the winter, and a *Kurili* thinks himself unlucky if he doth not catch three beavers in the season; besides which great numbers are thrown upon the shore by storms,

* Fucus marinus abietis forma. Pinus maritima, seu fucus teres. Dodd. Append. 326. Ray Linn.

CHAP.

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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A 304 175 [113]

/419 cont./

3. (cont.)
slovar' /Ainu-Russian Dictionary/, supplement to Uchen. Zap. Imp. Kazansk. Univ. 1875g., p. 33.

A 304 184

Rinsô (1808) (4) already noticed that the women there /420/ tattoo

4. "To-tats ki ko" (Siebold, Nippon, VII, p. 182).

themselves more feebly than those from Jesso and that in general this custom becomes less frequent there as one goes farther inland, that is, farther north from Aniwa. Finally, the same custom prevails among the Ainu of the Kurile Islands, and, indeed, according to Krascheninnikof (1), it extends to both sexes

A [113]

1. Krasheninnikov", "Opisanie zemli Kamchatki" (Polnoe sobranie putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 258).

there, but the men content themselves with blackening the middle of the lips, while the women tattoo themselves all around the mouth and also on the hands and arms almost up to the elbows.

K 302 [304]

It is very noteworthy that the ancient Italmen on Kamchatka, though surrounded by tribes among whom tattooing was a matter of course, did not themselves adhere to this habit, or bad habit, but only painted themselves white and red, which, before the arrival of the Russians, they practiced very heavily, "like monkeys," according to Steller, but later "much more moderately, in the fashion of the Cossack women" (2).

K [113] [386]

2. Steller, Beschreib. von dem Lande Kamschatka, p. 300. Krascheninnikof, op. cit., p. 68. To paint with white, the Italmen used either decayed wood or a naturally calcined mica which occurs here and there

K /420 cont./
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2. (cont.)
in Kamchatka, but for painting with red, a seatang pulverized with fish oil or seal oil.

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Among the peoples living farther to the north and east, on the other hand, tattooing is again a locally customary practice. Among the Koryak, to be sure, it is limited to only the women and is not general even among them, where it begins with the wedding and new designs are added every year, so that, according to Ditmar's testimony, some old women look mottled all over as a consequence of the tattooing (3). The custom of

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3. Ditmar, "Ueber die Korjäken und die ihnen sehr nahe verwandten Tschuktschen /On the Koryak and the Very Closely Related Chukchee/" (Bull. de la classe hist. philol. de l'Acad. Impér. des sc. de St. Pétersb., Vol. XIII, p. 102; Mél. russes, Vol. III, p. 5).

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The custom of tattooing is more generally widespread among the Chukchee, for among them it also extends to the girls from their ninth or tenth year on and even to some of the men. The latter, however, as a rule content themselves with only one or two short horizontal strokes above the root of the nose, a cross on each jaw, or the like, whereas the women tattoo more or less the entire face and the arms from the shoulder down to the wrist.

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According to Nordqvist (4), who has discussed this subject

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4. "Bidrag till kännedomen om Tschuktscherna /Contribution to Knowledge about the Chukchee/" (Ymer, 1882, p. 38).

in detail and has published a few patterns of Chukchee tattooing, they correspond in the basic features to those that Dr. Stuxberg

Ainu AB6
Kamchadal RY3

A 304 175 [113]

/419 cont./

3. (cont.)
slovar' /Ainu-Russian Dictionary/, supplement to Uchen. Zap. Imp. Kazansk. Univ. 1875g., p. 33.

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In the whole series of Paleo-Asiatic peoples from Jesso to Greenland we find only two small tribes who lack the custom of tattooing -- the Italmen on Kamchatka and the Gilyak on the Amur and on Sakhalin. Under these circumstances one might think that the custom of tattooing was formerly indigenous among these two peoples, too, but had disappeared in the course of time. Such an assumption, however, is not permissible. Steller's and Krascheninnikof's reports on the Italmen come from a time when the latter had by no means lost their national characteristics to such an extent that such a prominent and, if it existed among them, ancient custom as tattooing could have already completely disappeared without any remnants or traces and even without having left behind any accounts in the traditions. And, as was pointed out at the very beginning of this work, I became fully acquainted with the Gilyak at a time when they were still in full possession of their individuality. The complete lack of tattooing among the former as well as among the latter must therefore be regarded as part of their individuality in contrast to the other Paleo-Asiatic peoples.

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At first glance it might seem that this individuality of the Gilyak in the Amur region was also shared by other peoples, in particular those living adjacent to the Gilyak, for the Olcha, the Orok on Sakhalin, the Negda, and Samagir do not have the custom of tattooing. But the situation is essentially different among them. I think I can say with certainty that tattooing is not at all customary at present among the Olcha, /422/ for I became acquainted with them on several voyages throughout their habitation area. I became acquainted with the Samagir on the Gorin only in Ngagha, the largest of their villages, to be sure, and concerning the Orok on Sakhalin and the Negda, I met only isolated individuals, but other travelers, too, who had more contact with them, did not observe any kind of tattooing among them, for example, neither Middendorff and Schmidt among the Negda nor Poljakof, after a stay of several weeks on the east coast of Sakhalin, among the Orok there. This is very noteworthy

chatka expedition upon the haven of *Petropaulauſkay*. Its great beauty is its church, which is finely ſituated, and very well built. This fort has almoſt the ſame advantages and diſadvantages as the *Bolſcheretſkoi* fort, with this difference, that here the hunting of the beaver is more convenient; but the water is bad and unwholſome, ſo that they ſend frequently from this bay to the river *Awatſcha* for their freſh water.

We can give no account of the fifth fort, which was built upon the river *Tegbil* after my departure from *Kamtſchatka*. It was garriſoned with 37 male inhabitants. Mr. *Steller* tells us, that this fort was built with a view to reſtrain the ſettled *Koreki*, and for a ſtage to thoſe who travel round the *Penſchinſka* ſea to *Ochotſka*; and, in caſe of neceſſity, to protect the rein-deer or wandering *Koreki* againſt the *Tchukotſkoi*. The inhabitants of this fort can deprive thoſe of the lower *Kamtſchatka* fort of ſeveral advantages, becauſe they lie more convenient for hunting the ſable upon the river *Tegbil*, and the *Koreki* rather chuſe to bring their goods to them than to the two other forts, as being nearer.

CHAP. VI.

Of the Manner in which the Coſſacks live there; of their DISTILLERY, PROVISIONS, *&c.*

THE Coſſacks of *Kamtſchatka* live almoſt in the ſame manner as the natives, feeding like them upon roots and fiſhes; and their occupations are nearly the ſame. In the ſummer they catch fiſh for their winter proviſion, and gather nettles, of which they make nets. Their difference only ſeems

000 it ſeemed ſufficiently ſheltered, the wind penetrated on every ſide. M. Kaſloff had recourſe to the bath, which quickly reſtored him; but not daring to follow his example, I was obliged to wait the arrival of our baggage. The damp had penetrated to ſuch a degree that I ſhivered during the whole night.

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The next day I made a trial of theſe baths, and can ſay that none ever afforded me ſo much pleaſure or ſo much benefit. But before I proceed, I muſt deſcribe the ſource of theſe hot waters, and the building conſtructed for bathing.

They are two werſts to the north of the oſtrog, and about a hundred yards from the bank of the Bolchaia-reka, which it is neceſſary to croſs a ſecond time in order to arrive at the baths, on account of the elbow which the river deſcribes below the village. A thick and

[Natchikin (Nachiki?)--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

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and continual vapour aſcends from theſe waters, which fall in a rapid caſcade from a rather ſteep declivity, three hundred yards from the place where the baths are erected. In their fall, which is in a direction eaſt and weſt, they form a ſmall ſtream of a foot and half deep, and ſix or ſeven feet wide. At a little diſtance from the Bolchaia-reka, this ſtream is met by another, with which it pours itſelf into this river. At their conflux, which is about eight or nine hundred yards from the ſource, the water is ſo hot that it is not poſſible to keep the hand in it for half a minute.

M. Kaſloff has been careful to erect his building on the moſt convenient ſpot, and where the temperature of the water is moſt moderate. It is conſtructed of wood, in the middle of a ſtream, and is in the proportion of ſixteen feet long by eight wide. It is divided into two apartments, each of ſix

or

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or ſeven feet ſquare, and as many high: the one which is neareſt to the ſide of the ſpring, and under which the water is conſequently warmer, is appropriated for bathing; the other ſerves for a dreſſing-room; and for this purpoſe there are wide benches above the level of the water; in the middle alſo a certain ſpace is left to waſh if we be diſpoſed. There is one circumſtance that renders theſe baths very agreeable, the warmth of the water communicates itſelf ſufficiently to the dreſſing-room to prevent us from catching cold; and it penetrates the body to ſuch a degree, as to be felt even for the ſpace of an hour or two after we have left the bath.

We lodged near theſe baths in a kind of barns, covered with thatch, and whoſe timber work conſiſted of the trunks and branches of trees. We occupied two, which had been built on purpoſe for us, and

177 The various conſtructions which M.
515 Kaſloff ordered for the greater convenience
757 of his eſtabliſhment, detained us two days
823 longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of dis-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

7: Lesseps T-3 (1787-88) 1790 Kamchadal

312 " Water in general may contain,

" 1. Fixed air; in that case it has a " sharp and sourish taste, like lemonade, " without sugar.

" 2. Iron or copper; and then it has " an astringent and disagreeable taste, like " ink.

" 3. Sulphur, or sulphurous vapours; and " then it has a very nauseous taste, like " a stale and rotten egg.

" 4. Vitriolic, or marine, or alkaline salt.

" 5. Earth."

Fixed Air.

" To ascertain the fixed air, the taste is " partly sufficient; but pour into the water " some tincture of turnsol, and the water " will

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 "will become more or less red, in propor-
"tion to the quantity of fixed air it con-
"tains."

Iron.

"The iron may be known by means of
"the galnut and phlogisticated alkali; the
"galnut put into feruginous water, will
"change its colour to purple, or violet, or
"black; and the phlogisticated alkali will
"produce immediately Prussian blue."

Copper.

"Copper may be ascertained by means
"of the phlogisticated alkali or volatile al-
"kali; the first turns the water to a brown
"red, and the second to a blue. The last
"mode is the surest, because the volatile
"alkali precipitates copper only, and not
"iron."

Sulphur.

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Sulphur.

312 " Sulphur and ſulphurous vapours may
" be known by pouring, 1. nitrous acid into
" the water; if a yellowiſh or whitiſh ſedi-
" ment be formed by it, there is ſulphur, and
" at the ſame time a ſulphurous odour will
" be exhaled and evaporate. 2. By pouring
" ſome drops of a ſolution of corroſive ſubli-
" mate; if it occaſion a white ſediment, the
" water contains only vapours of liver of
" ſulphur; and if the ſediment be black, the
" water contains ſulphur only.

Vitriolic Salt.

" Water may contain vitriolic ſalts; that
" is ſalts reſulting from the combination of
" the vitriolic acid with calcareous earth,
" iron, copper, or with an alkali. The vi-
" triolic acid may be aſcertained by pouring
" ſome drops of a ſolution of heavy earth;
" for then a ſandy ſediment will be formed,
" which will ſettle ſlowly at the bottom of
" the veſſel.

Marine

7:Lesseps T-3 (1787-88)1790 Kamchadal

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Marine Salt.

"Water may contain marine ſalt, which "may be aſcertained by pouring into it ſome "drops of a ſolution of ſilver; a white ſedi- "ment will immediately be formed of the "conſiſtency of curdled milk, which will at "laſt turn to a dark violet colour.

Fixed Alkali.

"Water may contain fixed alkali, which "may be aſcertained by pouring into it "ſome drops of a ſolution of corroſive ſub- "limate; when a reddiſh ſediment will be "formed.

Calcareous Earth.

"Water may contain calcareous earth "and magneſia. Some drops of acid of "ſugar poured into the water, will preci- "pitate the calcareous earth in whitiſh "clouds, which will at length ſubſide and

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 " afford a white ſediment. A few drops of
" a ſolution of corroſive ſublimate, will pro-
" duce a reddiſh ſediment, but very gra-
" dually, if the water contain magneſia.

" Note. To make theſe experiments with
" readineſs and certainty, the water to be
" analyſed ſhould be reduced one half by
" boiling it, except in the caſe of the fixed
" air, which would evaporate in the boiling."

Having thoroughly ſtudied the proceſs, we began our experiments. The three firſt producing no effect, we concluded that the water contained neither fixed air, iron, nor copper; but upon the mixture of the nitrous acid, mentioned for the fourth experiment, we perceived a light ſubſtance ſettle upon the ſurface, of a whitiſh colour, and extending but a little way, which led us to believe that the quantity of ſulphur, or of

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 of ſulphurous vapours, muſt be infinitely ſmall.

The fifth experiment proved that the water contained vitriolic ſalts, or at leaſt vitriolic acid mixed with calcareous earth. We aſcertained the exiſtence of this acid, by pouring ſome drops of a ſolution of heavy earth into the water, which became white and nebulous, and the ſediment that ſlowly ſettled at the bottom of the veſſel appeared whitiſh and in very fine grains.

We had no ſolution of ſilver for the ſixth experiment, in order to aſcertain whether the water contained marine ſalt.

The ſeventh proved that it had no fixed alkali.

By the eighth experiment, we found that the water contained a great quantity of

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 calcareous earth, but no magnesia. Having poured some drops of acid of sugar, we observed the calcareous earth precipitate to the bottom of the vessel in clouds and a powder of a whitish colour; we mixed afterwards some solution of corrosive sublimate to find the magnesia; but the sediment, instead of becoming red, preserved the same colour as before; a proof that the water contained no magnesia.

We made use of this water for tea and for our common drink. It was not till after three or four days that we found it contained some saline particles.

M. Kasloff boiled also some of the water taken at the spring, till it became totally evaporated; the whitish and very salt earth or powder which remained at the bottom of the vessel, as well as the effect it produced

on

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 on us, proved that this water contained nitrous ſalts.

We remarked alſo that the ſtones taken out of this ſtream were covered with a calcareous ſubſtance tolerably thick, and of an undulated appearance, which, when mixed with the vitriolic and nitrous acid, produced ſymptoms of effervefcence. We examined others taken from what appeared to be the fountain head of the waters, and where they have the greateſt degree of heat; we found them covered with a ſtratum of a kind of metal, if I may ſo call a hard and compact envelopement of the colour of refined copper, but the quality of which we could not aſcertain; we found alſo ſome of this metal, which appeared like the heads of pins; but no acid could diſſolve it. Upon breaking theſe ſtones, we diſcovered the inſide to be very ſoft and mixed with gravel,

7: Lesseps T-3 (1787-88) 1790 Kamchadal

312 with which I had obſerved theſe ſtreams to abound.

I ought to add here, that we diſcovered upon the border of the ſtream, and in a little moving ſwamp that was near it, a gum, or ſingular *fucus* *, that was glutinous, but did not adhere to the ground.

Such are the obſervations which I made upon theſe hot waters, by aſſiſting M. Kaſloff in his experiments and enquiries. I dare not flatter myſelf with having given the reſult of our operations in a ſatisfactory manner; forgetfulneſs, or want of information upon the ſubject, may have led me into errors; I can only ſay that I have exerted all my attention and care to be accurate; but acknowledge at the ſame time,

* M. Kaſloff gave ſome of this gum to one of the naturaliſts of our expedition, the abbé Mongés, while the frigates were at Saint Peter and Saint Paul.

that

7:Lesseps T-3 (1787-88)1790 Kamchadal

312 that if there be defects, they are ascribable to me.

During our stay at these baths and at the ostrog of Natchikin, our horses had brought, at different times, the effects which we had left at Koriaki, and we began to make pre-
224 parations for our departure. In this interval I had an opportunity of seeing a sable taken alive; the method was very singular, and may give some idea of the manner of hunting these animals.

At some distance from the baths, M. Kasloff remarked a numerous flight of ravens, who all hovered over the same spot, skimming continually along the ground. The regular direction of their flight led us to suspect that some prey attracted them. These birds were in reality pursuing a sable. We perceived it upon a birch-tree, surrounded by another flight of ravens, and

29:Cochrane T-2 (1821-22) 1824 Kamchadal

758 nothing either to the industry or humanity of the
R doctor before alluded to.
177 The state of some of those miserable creatures
. 75 whom I saw in the hospital, was such as absolutely to prevent the doctor from dressing their wounds; of course I am incapable of describing them. They are allowed by the Emperor one pound of bread and half a pound of meat per day. They have also fish in abundance, and wild berries are to be found every where round the place. The patients, being all afflicted with one disease, are cramped up into one small space, never to go out but at their own desire, nor do any work, though they might raise an unlimited quantity of vegetables from the grounds covered with the warm vapour. In short, instead of being as it is, a place calculated to engender and nourish disease almost to pestilence, it might be, at a trifling expense and with proper care on the part of the head doctor, one of the most humane and efficient establishments on the face of the globe.

312 With respect to the nature and quality of the baths, they had a strong smell of sulphur, and an unpleasant taste. The hot and cold springs are united at the baths, and it is a strange circumstance, that the one should always be boiling hot in 25° of frost, while the other at 30° of heat is always below the freezing point. These were the only remarks my short stay, in the month of December, could enable me to make. I should, how-

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh-

 ed

134 present are no woods, but only ſhrubs, and ſtunted ſallows, and birches, were formerly covered with water, which has decreaſed by degrees here, as it has upon the north-eaſtern coaſt. Below the earth lies a bed of pure ice, extremely hard; and under that a ſoft wateriſh clay, with gravel; this continues from the ſea up to the very mountains, and will ſufficiently account for the barrenneſs of theſe parts. But, though the land is not every where fit for agriculture, yet ſome places upon the river *Kamtſchatka* (which have been already mentioned) and along the *Biſtroy* river, are ſufficient to furniſh with corn, not only the inhabitants, but alſo the neighbouring parts. It is however to be feared, that the burning of the woods, in order to clear the lands, may drive away the ſables, who have a particular averſion to ſmoke: this happened upon the river *Lena*, formerly the beſt hunting country, but now deſerted by theſe animals.

137 The ſcarcity of wood is a great inconvenience, both the *Ruſſians*
313 and natives being obliged to fetch it twenty or thirty verſts with
459 great trouble and loſs of time, for the neceſſary uſes of boiling their ſalt and curing their fiſh: and it is very difficult to bring it down in floats, becauſe the current is rapid and ſo ſhallow, that they can bring only two little bundles on each ſide of a ſmall fiſhing-boat; otherwiſe they would obſtruct themſelves in the management of their boat, and thereby run the riſk of being driven upon the rocks, ſand-banks, and trunks of trees, where not only their boat and wood, but frequently the people themſelves are loſt. Sometimes the ſcarcity of wood is ſupplied by ſuch as is thrown up by the ſea, which the inhabitants gather upon the ſhore; but this wood that has been ſoaked in the water, although they are at great pains to dry it, never burns clear, but ſmothers away with a continual ſmoke very hurtful to the eyes.

137 At the diſtance of 30 or 40 verſts from the ſea, and near the
313 heads of the rivers, grow birch-trees, alder, and poplar; of which the people build their houſes and make their boats. But this

this they bring down with great difficulty, using the method above mentioned: for which reason a very poor house will cost here 100 rubles and more, and a small fishing-boat five rubles. In other places, where the hills are nearer the shore, and the water-carriage easier, wood for firing and building is much cheaper. 137 313

Upon the *Bistroy* river, which falls into the Great River below the *Bolscheretskoi Ostrog*, grows the best wood that is in these parts; even the birch-trees are so large, that captain *Spanberg* built a sloop with their wood, in which he made several distant voyages to sea. 137

It is very remarkable, that when this vessel was launched she lay as deep in the water as a vessel full loaded; and it was believed, that she never would be fit to go to sea, but that the smallest loading would sink her. But, when she was laden, she drew very little more water, and few vessels sailed better or lighter, or could go nearer the wind: the reason of which may be, that as this wood has not so much rosin, it sucked a greater quantity of water at first, but so soon as its parts were once filled, it then sucked very little more.

There is great plenty of wood upon the eastern coast of *Kamtschatka*; from the hills down to the very shore grow very fine birch and alder trees. Beyond the river *Jonpanoba*, and towards its head, begin the woods which continue to the *Kamtschatka*, *Lopatka*, and along the river *Kamtschatka* to the mouth of the river *Elouki*. Up the river, almost to its head, grow likewise pines, but not large enough for buildings. About the neck of land which joins the peninsula of *Kamtschatka* to the continent, the wood begins again to fail.

The changes of the weather and air are commonly in the following order: harvest and winter make up more than one half of the year; and the spring and summer cannot be reckoned above 132

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 262 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

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† Alni.
‖ Pades foliis annuis. LINN.
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the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
233 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 314 439 * Their nets are made of pack thread, like ours; they purchaſe it of the Ruſſians: there is another kind however, which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

CHAP. IV.

Of the METALS *and* MINERALS.

135

ALTHOUGH the peninſula of *Kamtſchatka* is hilly, and the ground ſuch as might naturally be ſuppoſed to produce metals and minerals, eſpecially iron and copper, with which *Siberia* abounds; yet hitherto little has been diſcovered. This is no proof that ſuch ores are not in *Kamtſchatka*; for, beſides that the *Kamtſchadales* are entirely unexperienced, the *Ruſſians* who live here have as yet given themſelves no trouble in the ſearch after metals; as they have ſuch large quantities of iron and copper inſtruments brought to them, that they have not only ſufficient for themſelves, but are alſo enabled to furniſh the *Kamtſchadales* and *Kuriles* with them at a very conſiderable profit. It is alſo to be conſidered, that the providing for their ſubſiſtance takes up ſo much of their time, that they can ſpare but little for any thing elſe; and moreover, the places proper for ſuch tryals are very difficult of acceſs: to which it may be added, that the frequent ſtorms and general inclemency of the weather are great hindrances to ſuch tryals; eſpecially when every neceſſary for the undertaking muſt be carried upon men's backs, for in the ſummer they can carry nothing upon dogs. It is reaſonable to preſume that ore might be found in *Kamtſchatka*, if it was worth while to ſearch for it. Copper ore has been found about the *Kurilſkoy* lake, and the *Ivovoy* bay; and a ſandy iron ore upon the banks of the ſeveral lakes and rivers; whence it is expected that there is iron ore in the hills from which theſe lakes and rivers riſe. Native ſulphur is gathered about the rivers *Kambalinſkoy* and *Oſernoi*, and the *Kronotzkoy* cape. The ſulphur

316 439 135 316 135

7:Lesseps T-3 (1787-88)1790 Kamchadal

317/342 but objects cannot be seen through them. The leaves of talc are more clear, and approach nearer to glass; in the mean time they are not sufficiently transparent for persons without to see what is going on within: this is manifestly no inconvenience to such low houses.

622 554 R 177 .62 Every ostrog is presided by a chief, called *toyon*. This kind of magistrate is chosen from among the natives of the country, by a plurality of voices. The Russians have preserved to them this priviledge, but the election must be approved by the jurisdiction of the province. This toyon is merely a peasant, like those whom he judges and governs; he has no mark of distinction, and performs the same labours as his subordinates. His office is chiefly to watch over the police, and inspect the execution of the orders of government. Under him is another Kamtschadale, chosen

CHAP. V.

415 325

Of their HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 501 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into

a

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
172 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

[P. 104]

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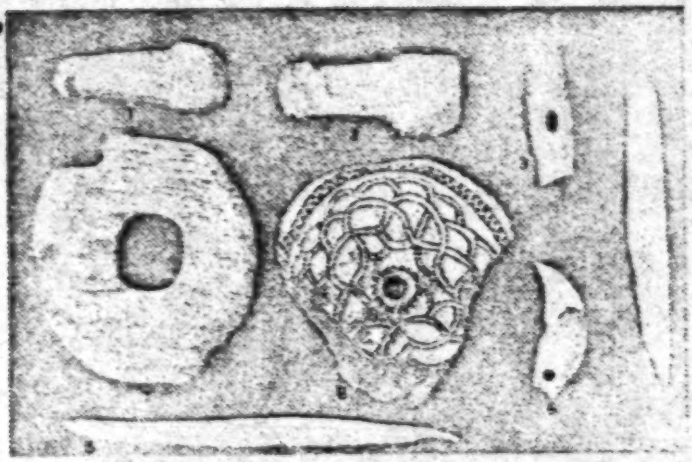
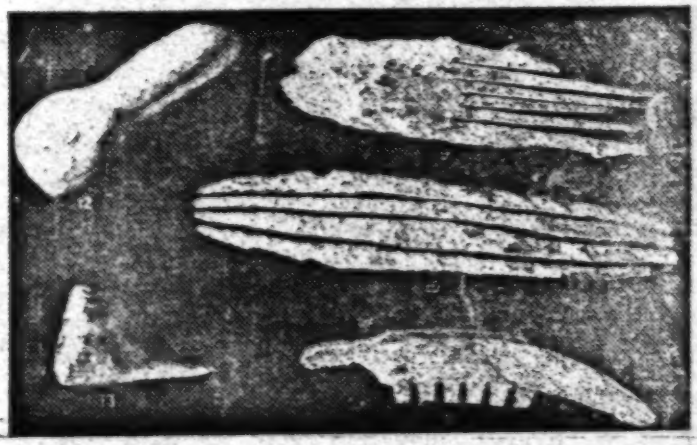
● 321





1, 2. Unknown bone implements. May be stamps to decorate clay pots when the clay is still wet.
3. Fragment of harpoon bone head.
4 and 5. Seem to be dressed bone prongs of a bird dart.
6. A perforated seal's tooth, worn as ornament.
7. Bone belt-buckle without decoration.
8. Bone belt-buckle ornamented with engraved zigzags, interwoven curves and circles.
9. Half dressed bone comb.
10. Comb-like bone implement, as it seems to the author, for impressing parallel lines under the rim of clay pots.
11. Bone implement for stamping clay pots, as shown on potsherds on Plates 17 and 18.
12. Bone implement for making fillets under the rim.
13. Bone implement for ornamenting clay pots by puncturing.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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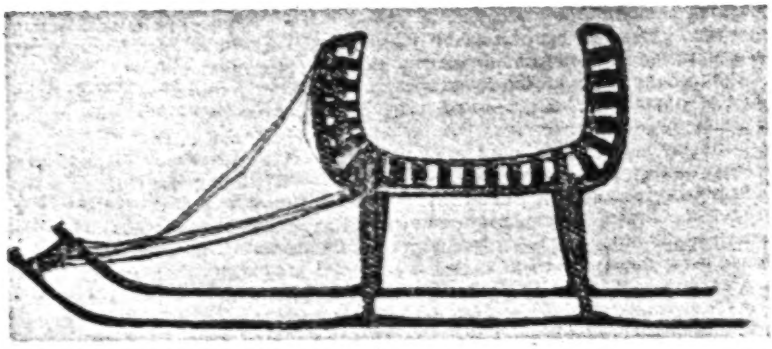

18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostroshkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

The birches of

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough ‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthus fructu rubro et nigro.
** Sorbus.

the

22: Guillemard T-2 (1882) 1886 Kamchadal

133 515 that the hand could not be borne in it. Of these, as in Japan, there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet. 322 824 531 The birch is to the inhabitant of northern regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

BIRCH-BARK BOX.

22: Guillemard T-2 (1882) 1886 Kamchadal

322 ornamented with stamped designs, and are occasionally painted, or
531 rather dyed, with blue and white; while the oval shape so commonly seen in Scandinavia is not infrequent. To the European traveller the tree is equally useful. Cups and other articles can be made with the greatest readiness; fires can be lighted in the wettest weather with the thin inflammable bark, and the inner layers of the latter form excellent writing-paper, the characters on which no quantity of rain will injure or render illegible.

133 The scenery some miles north of Narchiki begins to alter in
136 character, an alteration that is distinctly for the better. The monotony of the birch-forests is relieved from time to time by openings where the dense undergrowth is supplanted by little rocky knolls covered with bright mosses. The ground becomes more broken and the open spaces larger, and before long the country approximates closely in character to that which, in Scandinavia, would be designated the lower fjells. We had hitherto shot but little game, but here ptarmigan were abundant,[1] and we were able with ease to secure as many as were necessary for the table. Farther on, we came to a small stream, which was, most probably, an affluent of the Great Bolcheresk River, which debouches into the Okhotsk Sea on the western coast of the peninsula. It was crowded with dead and dying fish; and the remnants of some recently devoured ones upon the bank, together with fresh spoor of bear around them, told us that, in all probability, Bruin was not far off.

I had never before seen the tracks of this animal in such abundance, but farther north it was common enough to see the river-banks as much trampled as if a herd of cattle had been driven down to water. The bears at this season of the year live entirely upon salmon. Later, when this diet fails them, they take to berries, upon which they live until the time of hybernation, which is generally

[1] Probably a sub-species of, or perhaps identical with, the Dal-ryper or Willow Grouse of Scandinavia (*Lagopus albus*). I unfortunately omitted to preserve specimens of this bird until it was too late, and we did not shoot any after we had once begun the river journey.

CHAPTER VII.

000 KAMSCHATKA (*continued*).

We begin the river journey—Our rafts—Bad weather—Werchni Kamschatka—Melcova—A fish curral—Replenish our stores—Melcova church—*Kuklaukus* and *parkas*—Extortionate demands of the natives—Curious marl cliffs—Mashura—Rows with the people—Leprosy—Piles of driftwood—Onset of the cold weather—Tschappina—We sight the great volcanoes—Our camp-life—Wild fruits—Renewed quarrels with the natives—An awkward dilemma—We win the game.

157/576 On the morning of September 1st our horse-boys departed on their return journey to Petropaulovsky. Whether it is owing to the depression peculiar to the country, so enlarged upon by Kittlitz, I cannot say, but there seems to be an utter lack of geniality among these people. They took their wages resignedly, and bade us an unceremonious adieu. Handshaking—the kindly custom in Scandinavia and other nothern countries on the termination of an engagement between master and man—appears to be unknown in Kamschatka. Perhaps after all it was better, for I do not suppose that any of us felt any great degree of affection for Vodki, and at a later period of our journey, fist-shakings would have better expressed our feelings towards the greater proportion of the people with whom we were brought in contact.

Having despatched a letter to the yacht with instructions as to the date of departure for the rendezvous at the mouth of the river, we went down to the stream to make the necessary preparations
322/501 for our voyage. The only species of boat used in the interior of the country is the dug-out canoe,—a clumsily-shaped craft made

22: Guillemard T-2 (1882) 1886 Kamchadal

322 from the trunk of the *topoyina* or poplar-tree. They are generally
501 about twenty-five or thirty feet long, by two feet in beam and depth, and are made to a great extent by burning out the interior of the tree-trunk selected, the finishing only being done by means of axes. We were able to procure five of these boats, and by their aid constructed two rafts in the following manner. We lashed three together side by side, with an interval of about one foot between each, taking care to place the weakest in the middle, and on this foundation placed a platform of poles and axe-hewn planks amidships, for a length of twelve or fourteen feet. Over this platform we constructed a rough shelter-hut, with a birch-bark roof sloping away behind, and the back and sides composed of water-proof sheets which could easily be furled or removed when necessary. The other raft, which carried Louis, Cook, and our two hunters, was made in the same way, but without the hut; and owing to its having but two canoes as a foundation, was laden fully up to where its Plimsoll-mark should have been. Our natives sat at the head and stern of each canoe, wielding paddles with a spade-like handle. They were also provided with poles, the use of which, wherever the river was sufficiently shallow, they seemed greatly to prefer. Shortly before noon our preparations were completed, our men waved their adieux to the remaining three-fourths of the inhabitants of Sherowmy, and pushing out into mid-stream, we began our descent of the river.

PADDLE.

133 Immediately below the settlement the branches of the Kams-
136 chatka reunite to form a stream nearly as wide as the Thames at Hampton Court, but scarcely more than a foot or two in depth. The current is rather swift, but without rapids, and the only dangers to be apprehended are the snags beneath the surface of the water. In the upper part of the river there are not many, but, lower down, the tremendous freshets which occur on the

CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

114 At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times.
252 Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones,
323 and there is nowhere in the writings of these authors a reference to clay vessels.
415 Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Palæ-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.

[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I-II, 1819, St. Petersburg (in Russian).

[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1887, p. 138.

[4] See R. Torii, *Étude Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919-1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Khuchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851-1855*, p. 326, St. Petersburg, 1890, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thaleichtys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1924, p. 12, in Russian).

000 that they had been lamps, and not cooking pots; but this opinion may be offset by the shape, size and, especially, the depth of the pots found.[1]

● 323 415 Witsen, based on information received from cossacks, stated that the Kamchadal used clay vessels.[2] The Cossack Atlassov,[3] mentioned above, says in his report to the Government that the Kamchadal made pottery in his time.[4]

We see that before our excavations there were some indications as to the former pottery-making of the Kamchadal, but these were somewhat vague. Our diggings furnished more definite data concerning the Kamchadal types and methods of manufacturing pottery. We discovered two kinds of coarse clay vessels—with handles inside and with holes near the upper rim of the pots—and a kind of more elaborate ceramics with outer ornamental designs.

POTS OR PANS WITH EARS INSIDE

323 172 Fragments of pottery with handles inside were found by the writer in many diggings of the central and southern parts of Kamchatka, and he was fortunate to discover one complete pot in a pit on the shores of the Nalacheva Lake and another on the Nalacheva Cape (see Plate 17, figs. 1, 3). We may say that not only the wheel was unknown to the Kamchadal manufacturer of this rude kind of pottery, but neither the coil method nor the basket modeling process was applied by him, though there remained some impressions of basketry on the outer side. It seems that the vessels were worked out from single blocks of clay and beaten into shape. It is the crudest pottery. The dimensions of figure 1 have been given before (see p. 48). The thickness is about a third of an inch. It is difficult to say whether this kind of pottery was especially burnt before being used or was baked by the fire while cooking. The fact that these vessels remained intact after having been long buried under the ground proves that they were solidly made and water-tight. Being smeared with fat and blackened by smoke, they received a coating against water, which may be compared with the glaze of higher types of pottery. To make the clay more resistent it was tempered with sand, gravel and the hair of sables' tails.[5] The Cossack Atlassov, when presenting to the Government the tribute of the Kamchadal in sable-skins, delivered many of them without tails. In apologizing he said that the Kamchadal make boas of sables' tails and used the hair for tempering clay.

415 172 There is no doubt that the inside ears were intended for suspending the pot over the fire, as they afforded better protection to the suspending cord or thong than those outside the pan.

[1] Carl von Dittmar, *Reisen und Aufenthalt in Kamchatka in den Jahren 1851–1855*, St. Petersburg, Part I, p. 218. Dittmar gives the following measurements of a pot: upper diameter, 12 cm.; lower diameter, 10 cm.; maximum width, 14 cm.; depth, 10 cm. This vessel, therefore, had an aperture smaller in diameter than the middle part, and its bottom was still smaller than the aperture. Clay lamps are of a quite different shape, as shown by Bogoras, Nelson and other explorers of the northern regions.

[2] Nicolaas Witsen, *Noord en Oost Tartarye*, Amsterdam, vols. I–II, 2d ed., 1705, p. 873 (1st ed., 1692).

[3] See before p. 1.

[4] See G. Spassky, *Vladimir Atlassov the Conqueror of Kamchatka*, Jour. Imperial Russian Geographical Society, 1858, vol. XXIV, p. 164 (in Russian).

[5] Munro (*Prehistoric Japan*, p. 196) supposes that grass was mixed by the Kurilians in their primitive pottery, the clay of which became black, due to the carbonization of the grass. R. Torii (*Les Ainou des Iles Kouriles*, p. 188), referring to information received from old Kurilian people, says that the ancient Kurilian Ainos tempered clay for pottery with sand and minced grass called "nokkanki."

1. [The end of the 17th Century -- And 145]

171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found
415 in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments
172 of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 Fragments of a different kind of clay pots were found by the author in the
● 323 excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these
171 fragments seems to be from small vessels, the clay to be burnt, and the pots more
172 decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot has a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 82 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Torbel, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rims.

[4] See the author's work, *The Koryak*, p. 640, fig. 195.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

171 common with that of the thick and clumsy clay lamps and unbaked quadrangular
415 kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in the Koryak excavations were black from soot and fat, and were evidently well
● 323 baked, as they remained strong and hard, although they had been lying in the wet soil. All these potsherds were made of coarse clay containing fine gravel and pieces
172 of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen before (p. 30) that neolithic sites in the Baikal Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the earliest in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Aleuts is shown in figure 77.

[P. 105]

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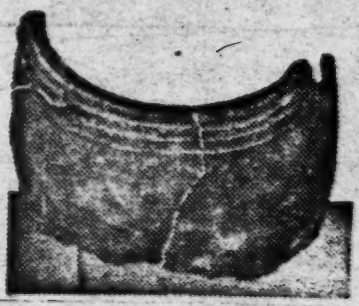
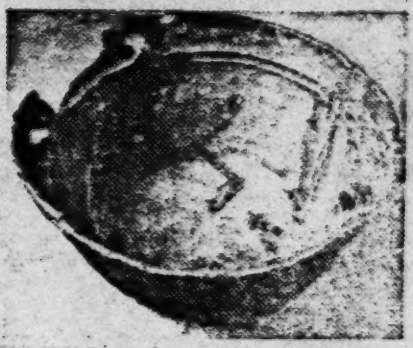
● 323





1. Clay pot with ears inside; discovered by the author in a pit of an old Kamchadal dwelling on the shore of Nalachevá Lake. The pot was split in two places, but complete, and later cemented by the author. The splitting may be regarded as a result of freezing and thawing of the soil. It was discovered at the depth of 3 feet 4 inches. Digging was done with great care. When a piece of the rim appeared, the spade was discarded and the earth from and around the pot was taken out by the hands. For the dimensions of the pot see p. 4a.
2. Similar clay pot of smaller size, discovered in a pit on the Nalachevá Cape.
3. Portion of upper part of a clay pot without handles inside. It consists of three fragments cemented together by the author. No other pieces of the same pot were discovered and we do not know whether its bottom was flat or rounded. Outer parallel lines made by a comb-like implement are similar to inner parallel lines of pots with handles inside.

Kamchadal

5: Jochelson A-5 (1910-11) 1928

[A 106]

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Fragments of clay pots, some with ears inside. From Nalycheva Cape, Nalycheva Lake, and shores of Kuril. Some of these fragments have no parallel lines inside.

Kamchadal

5: Jochelson A-5 (1910-11) 1928

[A 102]

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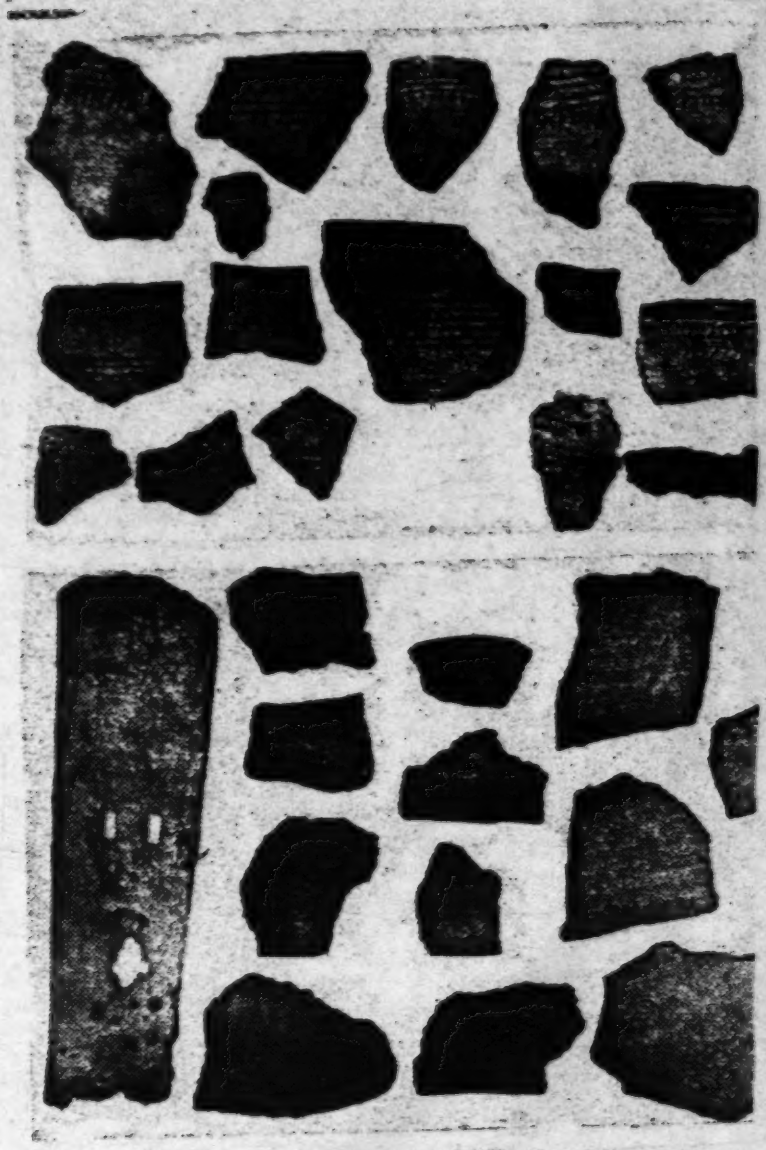


A (2701). 10 fragments of pottery discovered in the site of Kuhki River.
B (2602-2673). 12 fragments of pottery found in excavations of the banks of Kyenan River and a fragment some bone implement.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayryuyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

G /449 cont./ Mamia Rinsô (4),
323 to be sure, reports about the Ainu of southern Sakhalin that they
171 make earthenware vessels, and, to be sure, of two kinds, the
A one of about six to seven inches in diameter with ears on two
323 sides, tojes'ju, i.e., earthen pans, the other called kamui'sju,
[177] i.e., divine pans, but one cannot fail to recognize the recent
Japanese origin of this art. In the seventeenth century, when
A Vries and his companions discovered Jesso and the nearby Kurile
[175] Islands, they saw the inhabitants of them eating from lacquered
[172] wooden bowls /450/ and quadrangular troughs (1), and just such
[415]

A [113] 1. Siebold, Aardr. en volkenkund. toelicht. tot de ontdekk. van Vries /Geographical and Ethnographical Explanations from the Discoveries by Vries/, P. 108.

bowls, but no earthenware vessels, are among the articles that Poljakof found, besides skulls and bones, in old Ainu graves on Sakhalin and presented to our museum. Concerning the ancient
G Kamchadal, one finds, to be sure, in the report of the Cossack
321 Atlassof published by Witsen (2), the information that they
171
K
323
415
[113]

2. Noord en Oost Tartarye, ed. of 1705, p. 673.

manufacture for their own use earthenware and wooden vessels, but the former are more than questionable. Steller and
K Krascheninnikof saw only wooden vessels among them, and
[172] Ditmar (3), while digging on the sites where their yurts had once

K [113] 3. "Reisen und Aufenthalt in Kamschatka in den Jahren 1851-1855 /Travels and Residence in Kamchatka in 1851-1855/" (Beitr. zur Kenntn. des Russ. Reiches, third series, Vol. VII, p. 246).

stood, only once found, among numerous stone tools, a small piece of earthenware, which crumbled in his hands because it had not been fired, or at most only slightly, and which he thought was a train-oil lamp shaped by hand.

4. Op. Cit., p. 184.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

135 phur which they bring from *Olontoſki*, where it drops from the rocks, is quite fine and pellucid; and in the *Pyrites* upon the coaſt it is to be found every where.

The following kinds of earth are common. Great quantities of white chalk are found about the *Kurilſky* lake; tripoly and oker about the Great River, and the villages of *Nachikin* and *Koutchinubiff*; and a purple-coloured earth about the hot ſprings, 135 and ſometimes a hard ſtony oker. Among the ſtones in the mountains are found, but rarely, ſmall cherry-coloured chryſ- 324 tals; and near the river *Charious* are found pieces of fluſſe, which is like a coarſe green glaſs, of which the inhabitants formerly made knives, axes, lancets, and darts. It is called by the *Ruſſian* natives glaſs, and by the *Kamtſchadales*, *nanagy*. This fluſſe is alſo found in the copper mines about *Ecatherinenbourg*, where it is called a topaz. There is likewiſe here a ſort of light ſtone, white like chalk, of which the inhabitants make plates, and lamps wherein they burn their fiſh oil; and every where upon the ſhore is found an iron-coloured hard ſtone, porous as a ſpunge, and eaſily turned by the fire.

The inhabitants find pellucid ſtones near the ſprings of the river, which they uſe inſtead of flints. Some of theſe ſtones are ſemi-pellucid, whitiſh and milky, and reckoned cornelians by the *Ruſſians*. Some ſmall pellucid ſtones of a yellowiſh colour, like corals, are found upon the banks of ſeveral rivers; and plenty of hyacinths near *Tomſkoy*.

135 Hitherto they have diſcovered no precious ſtones here. The hills are firmer than thoſe in *Siberia*, and do not fall away like 278 them; but when the earth falls off they find much *lac lunæ*; and a ſoft kind of bolus, of a fattiſh creamy taſte, is found near the *Penſchinſka* ſea, *Kurilſkoy* lake, and the *Olutorſkoy*: this is uſed as an excellent remedy in fluxes. I ſent ſpecimens of 135 moſt of the above things to the Muſeum of the Imperial Academy of *St. Peterſbourg*. I muſt not forget to mention that

CHAPTER VI

ARCHÆOLOGICAL REMAINS FROM THE KAMCHATKA EXCAVATIONS

SOURCE MATERIAL FOR STONE IMPLEMENTS

324 The following is a list of minerals of which the Kamchadal manufactured their stone implements and weapons. The minerals are given in the order of their diminishing hardness:

1 Flint
2 Hornstone schist
3 Quartz schist
4 Quartzite
5 Jasper (variety of quartz)
6 Chalcedony (agate)
7 Andesite
8 Obsidian, andesitic
9 Augite, andesitic
10 Porphyrite
11 Sandstone
12 Quartz slate
13 Marble
14 Slate
15 Red ocher
16 Volcanic tuff
17 White clay

171 While on the Aleutian Islands[1] no flint implements were found, a considerable
324 number of arrow heads and other implements excavated by the author in Kamchatka were made of flint, according to the determination of a mineralogist, Professor A. G. Titov of the University of Moscow. The Aleut used andesite, instead of flint, most frequently for stone implements; the Kamchadal very seldom used this material, preferring the massive varieties of quartz and, partly, obsidian.

Soapstone, of which the Eskimo manufacture their lamps, is not met in Kamchatka and the Kamchadal use harder minerals for lamps, as will be seen later.

LOCALITIES WHERE EXCAVATIONS WERE MADE

172 The present writer made excavations in the following places:

(1) On the shore of Salt Lake on the isthmus in the Avacha Bay, August 19, 1910.
(2) In the Bogatyrevskaya Bay, above Salt Lake, in the forest, August 20, 1910.
(3) Cup-like holes were excavated not far from Salt Lake in afternoon of the same day.
(4) On the slope of the hill on the northeastern side of the Bogatyrevskaya Bay, August 21, 1910.
(5) In the village Syeroglaska, 10 miles from Petropavlovsk, August 25, 1910.
(6) In the village Savoiko, August 29–30, 1910. Savoiko is located on the left bank of the Avacha River, 16 miles from its mouth. Formerly it was called Stary Ostrog and renamed Savoiko after the Governor of Kamchatka (1850–1855), the senior captain and later admiral, V. S. Savoiko.

For numbers 1 to 6, see map of the Avacha Bay (p. 42).

(7) On the bank of the Nalacheva River, September 19.
(8) On the shores of the Nalacheva Lake, September 20 to 24, 1910.
(9) On the Nalacheva Cape, September 26–30, 1910.
(10) Ancient site on the mouth of Kulki River, emptying itself into the Tighil River, 4.8 miles from its mouth, June 10, 1911.
(11) Ancient site on the mouth of Ksvran River, June 27 to July 6, 1911.
(12) On the bank of Osernaya River, 2 miles from Kuril Lake, August 6, 1911.
(13) On the Siwunk Cape in Lake Kuril from August 9 to August 14, 1911.

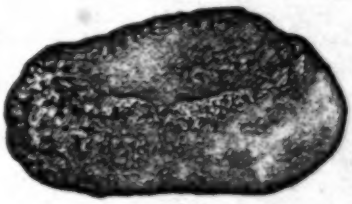
[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 88.

[pp. 38-40 have not been included in the file -- Analyst]

CHAPTER VII

STONE LAMPS

171 I discovered 36 stone lamps in excavations in Kamchatka. Some of them
354 were broken. All the types of ancient Kamchadal stone lamps are shown in Plates 14 and 15 and text-figures 64 to 66. They are not remarkable for great diversity as to size and form. I mentioned Aleut lamps[1] longer than 310 mm.,
172 and one lamp 1 meter long. There is in the U. S. National Museum at Washington an unusually large stone lamp (No. 90476) from Kodiak Island which weighs 67½ pounds.[2] An Eskimo stone lamp 43 inches long (i. e., somewhat



66

64

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64. Stone lamp of sandstone.
65. Stone lamp of porphyrite.
66. Stone lamp of andesitic lava, in process of manufacture.
All of Kuril Lake.

longer than a meter), weighing about 50 pounds is in the American Museum of Natural History of New York. Dr. Stefanson saw several larger lamps, but was unable to purchase them from their owners.[3]

354 The Kamchadal stone lamps show the following shapes: circular, elliptical,
172 egg-like and sad-iron in outline. No lamps of rectangular form, like those of the Aleut, and clam-shell shaped or crescentic in outline, like those of the Eskimo of Cumberland Gulf or Point Barrow, were excavated in Kamchatka.

354 Lamp No. 3158 shows the cavity rudely picked out with a hammerstone in the process of manufacture. All the other illustrations of lamps show them in a
● 324 finished shape and polished. The straight rims of some lamps were chiseled out with hard quartz chisels (see No. 2183). Most of the lamps are flat-bottomed, so
172 they stand without support. The lamp was put on a wooden stand in a somewhat

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 74.
[2] Walter Hough, *The Lamp of the Eskimo*, Annual Report, U. S. National Museum for the year 1897, Washington, 1898, pp. 1027–1057.
[3] See Vilhjamur Stefansson, *My Life with the Eskimo*, New York, 1913, p. 249.

[P. 102]

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324

1 (2211). Small lamp of quartz slate. Nalachevo Lake.
2 (2232). Cemented fragments of lamp of diorite. Kuril Lake.
3 (3136). Lamp of quartz slate. From Kuril Lake.
4 (3137). Lamp of quartzite. From Kuril Lake.
5 (3138). Lamp of sandstone. From Kuril Lake.
6 (3139). Lamp of quartz schist. From Kuril Lake.
7 (2921). Lamp of quartz schist. From Kavran site.
8 (2922). Lamp of quartzite. From Kavran.
9 (2923). Lamp of quartz slate. From Kavran.
10 (3140). Lamp of quartz slate. From Kuril Lake.
11 (3141). Lamp of quartzite. From Kuril Lake.
12 (3142). Lamp of quartz schist. From Kuril Lake.

Figures 1, 2 half natural size, figures 3 to 12 two-fifths natural size.

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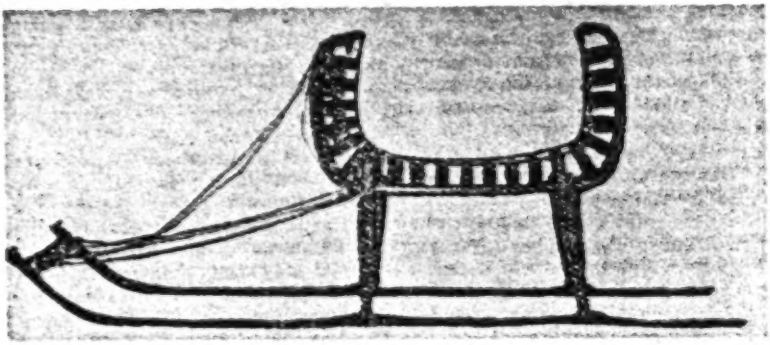

18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

CHAP. V.

415 325 *Of their* HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 501 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into a

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to
— let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they
— rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet
— they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
415 they are ingenious enough to make ſpears and arrows out of the
R. iron pots and kettles which they buy; and they are ſo dextrous
177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
489 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
177 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

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In the beginning of the seventeenth century the Japanese Government prohibited all navigation beyond its home waters, and before the Russians conquered Kamchatka the Kamchadal were not acquainted with the use of metals. However, there is no doubt that some iron instruments and other Japanese goods had reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

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It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.
[2] According to Krashenninikoff (vol. ii, p. 49, in Russian) the Kamchadal called a needle "dibb" and the Japanese as producers of needles "dibbanan."

[Pp. 22-36 have not been included in the file --Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchadal

000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

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● 325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as
554 coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka
172 at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

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342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
823 We may only surmise the reasons for such a diversity. We know that many of

Goldi RX3
Orok
Kamchadal RY3

Gi 325 177

/570 cont./

them but from the two peoples between which they had wedged themselves on the island. It is certainly a remarkable fact that /571/ a poor and not very numerous nomadic people like the Orok does not satisfy its small requirements in iron utensils from the neighboring sedentary peoples, but rather make their own. Yet it is even more noteworthy that the Orok manufacture these articles in such quantities that they even use them as articles for barter in their trade with the Gilyak, who themselves are skilled in the smith's craft, indeed, more skilled than the Orok, and from whom the latter, no less than their tribal relatives on the mainland, the Amur Olcha, presumably once learned it. In Ytkyrn in the Tymy Valley I saw a number of knife blades of various kinds (from the belt-knife, fish knife, etc.), which the Gilyak had obtained in trade from the Orok on the Poro-nai for tobacco (a few leaves for each piece). They were only crudely made and entirely without handles, merely the basic raw material, so to speak, which still needed to be worked over individually for polishing, buffing, mounting, and decorating by the Gilyak in order to reach its final specifications. Thus, in the making of iron tools, the Orok play the role of suppliers of raw material, so to speak, for the Gilyak -- a relationship that rests, on the one hand, on the large requirements of the Gilyak for such tools, with only a relatively small quantity of raw material, and, on the other hand, the opportunity offered by the Orok to procure this material in greater quantities from the not too distant Japanese, either directly or through the Ainu. If in this whole situation the Orok occupy only a subordinate place in relation to the Gilyak they, on the other hand, manifest an unquestionable superiority in comparison with the Ainu, at most functioning only as middlemen for the raw material, and their far greater political independence with respect to the Japanese corresponds to this.

Gi 325 439 177

K 325 177

In addition to the Ainu and Gilyak, there is still another Paleo-Asiatic people that received its first knowledge of iron from Japan. This is the Italmen or Kamchadal, and, to be sure, the iron, as in the case of the Gilyak, was brought to them by the Ainu.

2: Schrenck--895 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu ABC

/571 cont./

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Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

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2: Schrenck--896 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Kamchadal RY3
Ainu AB6

K 823 A 439 823 186

/572 cont./

their eyes, of course, were surrounded with the aura of great wealth and esteem, made those knives, swords, and the like which they themselves (the Ainu) prized so highly and paid for so dearly in trade with them. How very much this was the case can be seen from Steller's information that the Kurile Ainu gladly gave 20 sea beavers for an old Japanese saber and thought that they had made a very good trade, but wore such sabers only on festive days or during festive processions and made "the strangest figures during the welcoming" with them.

A 439 435

For the moment it must remain undecided whether the above-mentioned iron needles, which came from Japan to the Kamchadal as their first iron implements, spread from the latter to their neighbors, the Koryak and the Chukchee, before iron was brought these peoples by the Russians. At any rate, three Paleo-Asiatic peoples, the Ainu, the Gilyak, and the Kamchadal, received iron from Japan, and this was a natural consequence of the geographical position of the latter in the vicinity of these peoples, for just to the north of Nippon, the principal island of Japan, is the island of Jesso, the principal region of the Ainu (1),

G A K 439 17 325

A [131] [114] [113]

1. The view advanced chiefly by Ph. Siebold that the Ainu formerly also inhabited the north of Nippon (see above, p. 255) has recently been attacked by Brauns ("Die Bewohner des Japanischen Inselreichs /The Inhabitants of the Japanese Island-Realm/" in the Jahresber. des Frankfurter Vereins für Geogr. u. Statist., Years 48 and 49, 1883-1884, 1884-1885, Scientific Part, pp. 5 ff).

which, in turn, on the one hand, leads to the half-Gilyak Sakhalin, and, on the other hand, via the chain of the Kuriles, to Kamchatka. One may therefore draw the further conclusion that at the time when these peoples lived farther in the interior

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2: Schrenck--897 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Kamchadal RY3
Ainu AB6

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/572 cont./
of the continent (2), as may be presumed for various reasons,

2. See p. 247 above /untranslated/.

they still had no knowledge of iron and obtained this only after they had become peripheral peoples, that is, after they had been pushed to the extreme eastern coast of the mainland and to the islands and peninsulas lying in front of it and had thus arrived in the vicinity of Japan (3).

3. The question as to the origin and development of ironworking in Japan lies, of course, outside the scope of this work.

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If we now return to the Gilyak after this digression, this is the place, in concluding the above discussion of their weapons used for hunting on land and on the water, to mention a few other pieces of their armament. First to be mentioned here are two types of armor (Gilyak petsch) which are completely different in form, material, and origin, /573/ and which, to be sure, are no longer in use at present, but are of no little historical-ethnographic interest.

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One of them is iron armor (Gilyak wytsch-petsch). This consists of thin, longish, iron lamellas provided with holes, by means of which they are fastened close to one another on animal or fish skins with straps. The headpiece of this armor (Plate XLIV /see p.1024/, Fig. 2) has the shape of a helmet. The upper, rounded ends of its iron lamellas are bent back somewhat and wound with a strap; a piece designed for the protection of the neck hangs down from its lower edge. The breast or body piece (ibid., Fig. 3), of which I saw only individual parts (in the village of Tebach) consists of several rows of iron lamellas overlapping from top to bottom, which are wider and longer than those of the headpiece. In speaking of the Smerenkur (Gilyak) of Sakhalin, Mamia Rinsô (1) mentions this iron armor and says

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1. Op. cit., p. 194.

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſhed

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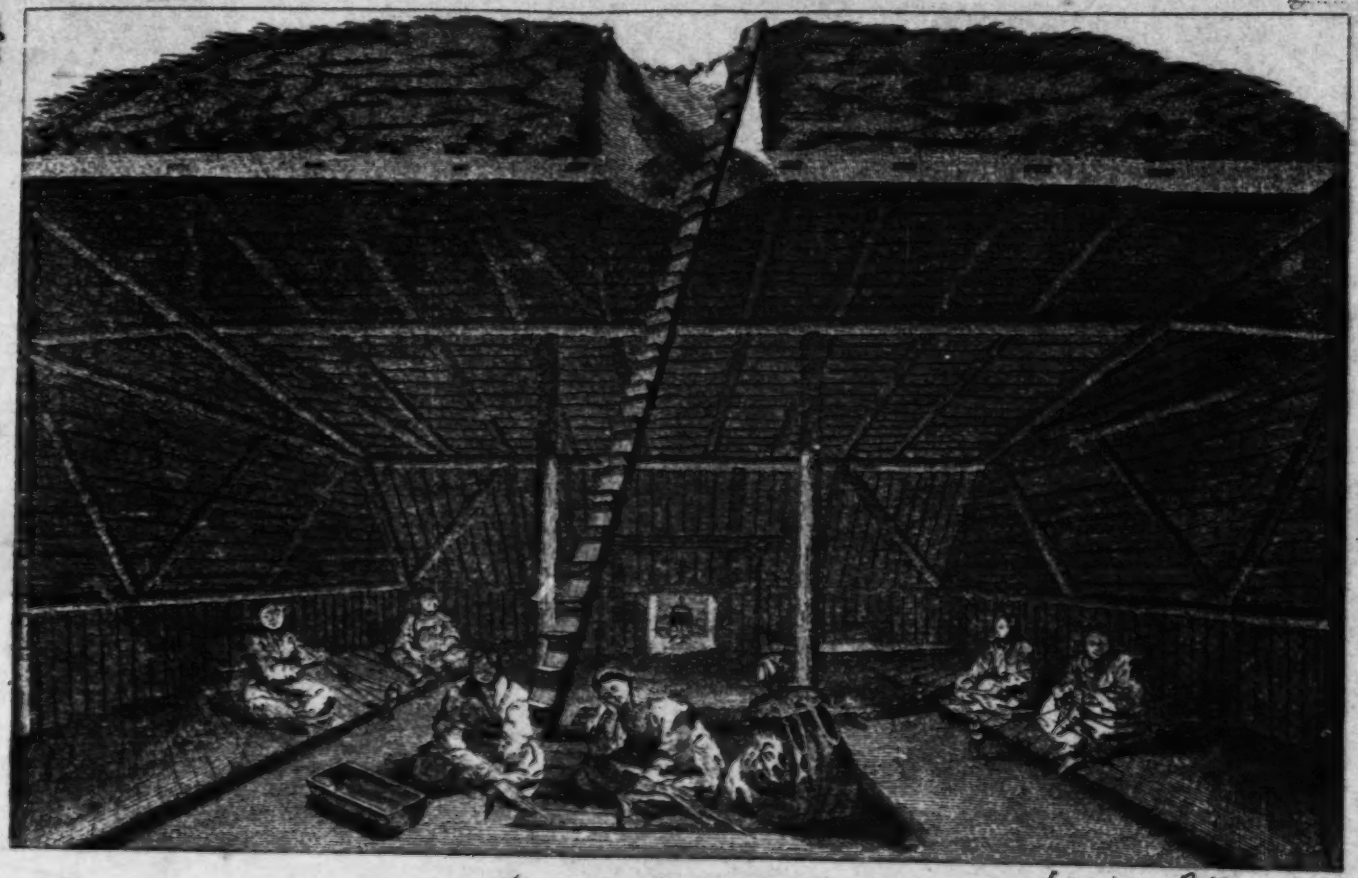

The Inside of a Winter Hut

facing R 181

1. Krashenninikov N-5 (1736-40) 1764 Kamchadal

CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtſchadales. 361

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a 342
hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-place is in one of the long ſides of the ſquare: between the 352
pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs.

They enter their huts by ladders commonly placed near the 342
fire hearth, ſo that when they are heating their huts the ſteps 417
of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 626

to

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

Summer Huts.

342/417

facing p. 182

342 to ſuffocate any one who is not inured to bear it: but the
417 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 tions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpecially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

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P23 We may only surmise the reasons for such a diversity. We know that many of

342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1] 2

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not as high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 180). The storehouse on posts is known everywhere in Siberia, as well as in North America.

1. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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According to Krasheninnikoff the ancient Kamchadal had still another kind of summer dwelling, the superterrene grass lodge called bashabash. Unfortunately he does not state its shape—whether it was of a conical or hemispherical type. The bashabash was put up at the fishing places near the dwellings on piles and served chiefly as a place for cooking, which could not be done on the wooden platforms of the pile-dwellings.

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White clay, pieces of which were found in some of the excavations, was eaten by the Kamchadal, according to Krasheninnikoff (II, p. 180), as a remedy for diarrhœa. Bogoras relates (*The Chukchee*, p. 200) that the reindeer Chukchee, the Koryak and Lamut in Kamchatka, occasionally use as food a kind of white clay called by them nute-ecen (earth-fat). The Kamchadal called the white clay "earth sour cream." Sternberg tells (*The Gilyak*, p. 17) of a Gilyak favorite dish for treating guests, called moss, which consists of a mixture of the gluey broth of fish skins, seal's fat, berries, rice, and sometimes of minced dried fish, to which the solution of white clay is added.

It must be noted that the use of some kinds of clay as food is not limited to Siberia alone. The eating of edible clay has been observed among certain Guiana Indians,[1] Carib and Antillean islanders,[2] and among the people of Georgia and the Carolinas.[3] Deniker refers to many other places where the habit of eating certain earthy substances—kaolin, clay, limestone—has been observed. He calls this habit *Geophagy* and explains it by the need of supplying the needed mineral substances (calcareous or alkaline salts).[4]

[1] W. E. Roth, *An Introductory Study of the Arts, Craft and Customs of the Guiana Indians*, Annual Report of the Bureau of American Ethnology, 1924).

[2] William Sheldon, *Brief Account of the Caribs who Inhabited the Antilles*, Transactions of the American Antiquarian Society, I, 1820, pp. 365–435).

[3] Charlotte D. Gower, *The Northern and Southern Affiliations of Antillean Culture*, Memoirs of the American Anthropological Association, Number 35, 1927, p. 28.

[4] J. Deniker, *The Races of Man*, London, 1900, p. 145.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

[P. 92]

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A. A Kamchadal storehouse on posts which serves also as a summer dwelling.
B. Greek-Catholic chapel in the village Kharyusovo.

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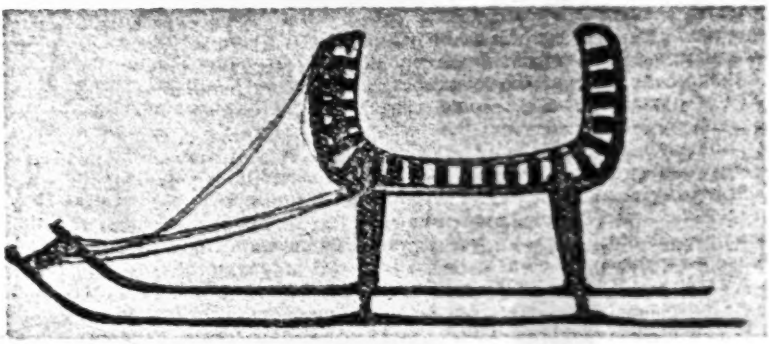

18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 164 133 ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavlofska*.

342 R 177 . 34 The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

they

7:Lesseps T-3 (1787-88)1790 Kamchadal

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they ſhould be brought gradually to reſemble the Ruſſian peaſants, they are prohibited, in this ſouthern part of Kamtſchatka, from conſtructing any more *yourts*, or ſubterraneous habitations; theſe are all deſtroyed at preſent*, a few veſtiges only remain of them, filled up within, and appearing externally like the roofs of our ice-houſes.

342 The balagans are elevated above the ground upon a number of poſts, placed at equal diſtances, and about twelve or thirteen feet high. This rough ſort of colonnade ſupports in the air a platform made of rafters, joined to one another, and overſpread with clay: this platform ſerves as a floor to the whole building, which conſiſts of a roof in the ſhape of a cone, covered with a kind

* I met with ſome afterwards in the northern part, which I took care to examine, and have deſcribed in their proper place.

of

7:Lesseps T-3 (1787-88)1790 Kamchadal

342 of thatch, or dried grafs, placed upon long
354 poles faftened together at the top, and bear-
511 ing upon the rafters. This is at once the
417 firft and laft ftory; it forms the whole apartment, or rather chamber: an opening in the roof ferves inftead of a chimney to let out the fmoke, when a fire is lighted to drefs their victuals; this cookery is performed in the middle of the room, where they eat and fleep pell-mell together without the leaft difguft or fcruple. In thefe apartments, windows are out of the queftion; there is merely a door, fo low and narrow, that it will fcarcely fuffice to admit the light. The ftair-cafe is worthy of the reft of the building; it confifts of a beam, or rather a tree jagged in a flovenly manner, one end of which refts on the ground, and the other is raifed to the height of the floor. It is placed at the angle of the door, upon a level, with a kind of open gallery that is erected before it. This tree

retains

7:Lesseps T-3 (1787-88)1790 Kamchadal

Those of winter are less singular; and if equally large, would exactly resemble the habitations of the Russian peasants. These have been so often described, that it is universally known how they are constructed and arranged. The isbas are built of wood; that is to say, the walls are formed by placing long trees horizontally upon one another, and filling up the interstices with clay. The roof slants like our thatched houses, and is covered with coarse grass, or rushes, and frequently with planks. The interior part is divided into two rooms, with a stove placed so as to warm them both, and which serves at the same time as a fire-place for their cookery. On two sides of the largest room, wide benches are fixed, and sometimes a sorry couch made of planks, and covered with bears skin. This is the bed of the chief of the family: and the women, who in this country are the slaves of their husbands, and perform all the

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7:Lesseps T-3 (1787-88)1790 Kamchadal

562 the moſt laborious offices, think themſelves
352 happy to be allowed to ſleep in it.

Beſides theſe benches and the bed, there is alſo a table, and a great number of images of different ſaints, with which the Kamtſchadales are as emulous of furniſhing their chambers, as the majority of our celebrated connoiſſeurs are of diſplaying their magnificent paintings.

342 The windows, as may be ſuppoſed, are
237 neither large or high. The panes are made of the ſkins of ſalmon, or the bladders of various animals, or the gullets of ſea wolves prepared, and ſometimes of leaves of talc; but this is rare, and implies a ſort of opulence. The fiſh ſkins are ſo ſcraped and dreſſed that they become tranſparent, and admit a feeble light to the room*;

* They produce an effect ſomewhat ſimilar to the oiled paper in the windows of our manufactories.

but

7:Lesseps T-3 (1787-88)1790 Kamchada?

317 but objects cannot be ſeen through them.
342 The leaves of talc are more clear, and approach nearer to glaſs; in the mean time they are not ſufficiently tranſparent for perſons without to ſee what is going on within: this is manifeſtly no inconvenience to ſuch low houſes.

622 Every oſtrog is preſided by a chief, called
554 *toyon*. This kind of magiſtrate is choſen
R from among the natives of the country,
177 by a plurality of voices. The Ruſſians
.62 have preſerved to them this priviledge, but the election muſt be approved by the juriſdiction of the province. This toyon is merely a peaſant, like thoſe whom he judges and governs; he has no mark of diſtinction, and performs the ſame labours as his ſubordinates. His office is chiefly to watch over the police, and inſpect the execution of the orders of government. Under him is another Kamtſchadale, choſen

000 have proceeded from the north, and been very heavy, which was confirmed by the inhabitants. Our road lay invariably through a foreſt of birch trees, and for ſome time we loſt ſight of the mountains, by which we had paſſed the preceding evening; but as we drew nearer to Pouſchiné they became viſible again.

354 The Kamtſchatka runs by the lower end
361 of this oſtrog, which is larger than that of
342 Ganal. The only thing I remarked in this place was, that the iſbas had no chimneys; they have only, like the balagans, a narrow opening in the roof to let out the ſmoak, which is frequently cloſed up by a trap door to confine the heat. It is not poſſible to continue in apartments warmed in this manner; we muſt either come out, or proſtrate ourſelves on the floor, if we would eſcape being ſtifled, or at leaſt blinded, by the ſmoke: it does not aſcend directly towards

7:Lesseps T-3 (1787-88)1790 Kamchadal

354 wards the roof, but ſpreads a thick black
342 cloud over the chamber; and as it ſeldom has time wholly to evaporate, the interior part of theſe iſbas is lined with ſoot, which gives them a diſguſting aſpect and a moſt offenſive ſmell.

354 But it is ſtill leſs unpleaſant than the
356 noiſome odour exhaled from a diſmal lamp, that ſerves as a light to the whole houſe. Its form is not of the moſt elegant kind: it is ſimply a hollow pebble or ſtone, with a rag rolled up in the middle for a wick, round which is placed the greaſe of the ſea wolf, or other animals. As ſoon as the wick is lighted, we are immediately ſurrounded with a dark and thick vapour, which contributes equally with the ſmoke to blacken the whole room: it ſeiſes the noſe and throat, and penetrates to the very heart. This is not the only diſagreeable ſmell that is experienced in theſe habitations; there is

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ſtock of dried fiſh, not yet come up, and intended for the nouriſhment of our dogs in the deſerts, which we are now to traverſe, I ſhall embrace this opportunity of tranſcribing various notes made in this and the preceding villages. They will not be placed in the ſame order as they were written; it muſt be ſuppoſed that the rapidity with which we travelled, frequently left me no choice in this reſpect*.

342 I ſhall firſt ſpeak of the yourts, which I have not yet deſcribed, deſerving as they are of particular attention. Theſe ſtrange houſes are ſunk in the earth, as I before obſerved, and the top, which appears above

* I ſhall be cenſured perhaps for making my narrative abound with dry and uniform details. I would willingly ſpare the reader in this reſpect, if I had not promiſed to obſerve the utmoſt accuracy. Let him conſider the objects with which I am ſurrounded in the immenſe extent of country that I travel, and he will perceive that they are almoſt always the ſame. Does it then depend upon me to vary my deſcriptions, and avoid tautology?

ground,

342/354 ground, is like a truncated cone. To form a juſt idea of them, we muſt conceive of a large ſquare hole about twelve or fourteen yards in diameter, and eight feet deep; the four ſides are lined with joiſts or boards, and the interſtices of theſe walls are filled up with earth, ſtraw, or dried graſs, and ſtones. In the bottom of this hole various poſts are fixed, that ſupport the croſs beams upon which the roof reſts. The roof begins upon a level with the ground, and riſes four feet above it; it is two feet thick, has a very gradual ſlope, and is made of the ſame materials as the walls. Towards the top is a ſquare opening, about four feet long and three wide, which ſerves as a paſſage for the ſmoke * and an entrance to the

* There is ſuch a continual ſmoke in theſe ſubterraneous habitations, that the opening in the roof is not ſufficient to let it out, and there is therefore in an unoccupied corner of the yourt, behind the fire-place, a kind of vent-hole in an oblique direction. It is called *joupann*; it terminates without, at a little diſtance from the ſquare opening, and is commonly cloſed up with a mat or ſtraw covering.

342 yourt, where the women as well as the
men go in and out by means of a ladder,
or notched beam, that is raiſed to a level
with this opening. There is another very
low entrance in one ſide of the yourt, but
it is conſidered as a kind of diſgrace to
351 make uſe of it. I ſhall terminate the de-
ſcription of the exterior part of theſe habi-
tations by adding, that they are ſurrounded
with tolerably high paliſades, doubtleſs as
a protection againſt the gales of wind, or
falls of ſnow; it is ſaid, however, that theſe
encloſures formerly ſerved as ramparts to
defend theſe people againſt their enemies.

342 We have no ſooner deſcended theſe ſavage
352 abodes, than we wiſh ourſelves out again;
the view and the ſmell are equally offenſive.
The interior part conſiſts of one entire
room, about ten feet high. A bench, five
feet wide, and covered with various ſkins,
half worn out, extends all round it. This
bench

22: Guillemard T-2 (1882) 1886 Kamchadal

000 onlooker it would seem as if we were deliberately beaching the vessel. "Starboard! hard a-starboard!" comes the order. "'Ard a-starboard," echoes the man at the wheel. "Hard a-port!" "'Ard a-port it is," he sings out, clawing the wheel towards him with foot and hand. "Well! I'm blessed if ever I see the likes of this 'ere place," I hear Jack mutter as we are safely berthed, and, on the whole, I am very much inclined to agree with him.

505 Our arrival created no little excitement among the inhabitants of this remote little spot: it might possibly have created even more had we not entered the harbour almost at the moment of departure of the yearly fur steamer for Japan *viâ* Okhotsk. All Petropaulovsky had assembled to wave their adieux, and not a few of them appeared torn by the conflicting desires of seeing the last of their friends and of discovering the business of the new-comers.

161 The steamer was hardly under way before we were receiving our
361 visitors. They were but limited in number. Petropaulovsky, in
342 spite of the imposing letters to which it is treated in the maps, is, after all, little more than a hamlet, and is probably stationary, if not actually decreasing, with regard to population. Clerke, in 1779, found the settlement consisting of thirty huts built upon the sand-spit to which I have already alluded, and consisting mostly of yourts or balagans.[1] Captain Cochrane, who in 1821 performed the unprecedented feat of walking across Siberia from Russia to Kamschatka, describes it as having increased to fifty-seven buildings, some of which were on the mainland; and at the period of the Crimean war it appears to have been as large as it is at the present time, if not actually larger. The town had been transferred to the head of the little harbour, where it now stands, and boasted of no less than two hundred edifices of all kinds. But in Kamschatka, as in other northern countries, winter storehouses, fish-drying sheds, and other out-buildings are so numerous, that the actual dwelling-

[1] A yourt is a semi-subterranean winter dwelling, roofed with turf. The balagans are only used in summer: they are rough wooden buildings erected on piles. The upper part serves as the dwelling-house, while, beneath, the salmon are hung up in rows to dry.

28: Sarytschew--67 T-1 (1789-90) 1806 Kamchadal
116, 157, 177, 181, 291, 342

"On comparing the present condition of the Kamtschadales, and their way of living, with Krascheninikow's description of them, we find them to have undergone a remarkable change. They have now almost entirely renounced their former superstitious customs, and submitted to baptism. Jurts, or subterraneous dwellings, are now vanished, and their place is every where supplied by Russian isbas. The female Kamtschadales have a dress for holidays very similar to those of the female Kosaks, for they wear stomachers and petticoats, and bind a handkerchief round their heads. The abundance of fish, and the facility with which they prosure a subsistence, now grown pleasant by habit, are probably the causes why they make no exertions in agriculture, or the breeding of cattle. It is much more remarkable, that their long and close intercourse with the Russians should not have given them a little more worldly wisdom; for they continue to this moment to barter their sables and foxes skins for the merest trifles. With this deficiency in cultivation, they retain, however, their good qualities, and are just as good-hearted, sincere, peaceable, obliging, and hospitable as before. Their prominent faults are uncleanliness and idleness. Thieving is very rare, and murder still more rare. Some travellers charge them with the vice of drunkenness, but I cannot confirm this with my testimony; whatever bad exceptions there may be, they cannot serve as a general rule."

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

[113]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

[417]

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojacht tschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

342 [364] [419] [101]

/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114 10 [113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

G /353 cont./
352 running under it and therefore is better suited for the feet than
354 for the head. There is another justification for this custom in
513 the winter houses of the Amur peoples. If one lies with his
516 head against the wall, he exposes himself so that the rats,
171 which are exceedingly abundant in these houses and which al-
[136] ways run along the walls, would be constantly running over the
G face. This alone, however, would not make the Gilyak refuse
[184] to allow even a stranger to assume this position on their kang,
[177] if superstition did not demand strict observance of the tradi-
tional custom, and afraid of any violation of it, no matter by
G whom, as misfortune for all the inhabitants of the house.
342 Due to the lack of historical data, it cannot be deter-
171 mined when the Chinese winter-yurt reached the Gilyak on the
Amur and, gradually spreading downstream, supplanting the
earth yurt, reached the Amur-Liman, the coast of the Sea of
G Okhotsk, and the Liman coast of Sakhalin. In the reports of
[175] Pojarkof and Nagiba, who spent the winter among the Gilyak
at the mouth of the Amur and along the Sea of Okhotsk in 1644-
45 and 1652 (3), there are, unfortunately, no hints which would

3. See pp. 216, 219 ff. above.

K permit conclusions about the nature of the Gilyak houses at that
342 time. In the case of another Paleo-Asiatic people, the Kam-
177 chadal, we see the original earth-yurt completely disappear
175 before an imported, foreign type of house construction within
the short space of about 50 years. At the time of Krascheninnikof
and Steller (in the forties of the previous century), all the
Kamchadal still lived in earth yurts of the type described above.
Even in 1779, when Clerke, the successor of Cook on the latter's
third voyage, visited Kamchatka, at least the south of the
peninsula, between Peter-and-Paul's Harbor and Bolscherezk (4).

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[113]

4. Tagebuch einer Entdeckungsreise nach der Südsee in den Jahren 1776-1780 unter Anführ. der Capitäne Cook, Clerke, Gore und King, transl. by J.R.Forster, Berlin, 1781, p. 333.

/353 cont./

K 342 175 177 Shortly thereafter, however, in 1790, Ssarytschof reported /354/ from his journey through the country that there were no longer any earth yurts anywhere and that instead of them Russian-style houses (log houses, so-called isba) had been built everywhere; only the summer dwellings of the Kamchadal, which are likewise peculiar, had been retained (1). On the basis of a remark by

G 114 175 342 177

1. Sarychev", Putesh. po Sieverovost. chasti Sibiri, Pt. I, p. 179.

Mamia Rinsô on his voyage in 1809 from Deren down the Amur, one might think at first glance that the same thing had happened among the Gilyak on the Amur. Coming from the territory of the S'janta (Olcha), when he entered the territory of the Smerenkur (Gilyak) at Horo (Chjare), he noticed that from there on people, dwellings, implements, and way of life changed and became exactly the same as on Krafto (Sakhalin) (2). One might

2. Siebold (Nippon, VII, p. 177). Cf. also p. 248 above.

think, therefore, that at that time the Gilyak on the Amur were still living in earth yurts as on Sakhalin. But this is impossible, for, as mentioned above (p. 466), four years earlier Krusenstern had found Chinese winter-yurts among the Gilyak on the northern tip of Sakhalin, that is, at the farthermost point, as far as these dwellings are found even today. If, in addition, one considers the fact that Mamia Rinsô was traveling in summer, there can be no doubt but that his above remark referred to the summer dwellings, which in fact, as we shall see in a moment, are quite different among the Gilyak on the Amur and on Sakhalin than among their neighbors, the Olcha, and the other Tungusic Amur-peoples. Conditions in Kamchatka and in the lower Amur region were too different to have produced an equally rapid disappearance of national peculiarities in both places. In the former, the Russians, after conquering the region, settled

K 342 177 G [342] [177] K [648]

K /354 cont./
342 permanently among the natives, who were greatly decimated by
177 the previous bloody battles, building their houses in their own
648 way and entering into permanent, peaceful relations with the Kamchadal, even mixing with them more and more. It is therefore not surprising that their style of building soon became the customary one throughout the region. Matters were differ-
G ent in the lower Amur region among the Chinese and Manchu:
342 a conquest and colonization of this region by the peoples named
177 have never taken place. As was discussed above in detail (3),
439
[648]

3. See pp. 119, 142-144 above.

it instead was and is visited only from time to time by individual Manchu officials and Chinese merchants who, in a few places where they have their own houses, always take up residence in the houses of the natives, and this only among the Tungusic Amur-peoples, for the Gilyak have even denied the
G Chinese traders entry into their region. Hence, it undoubtedly
[174] must have taken a long time before the Chinese winter-yurt reached the Gilyak from the Chinese on the Sungari, spreading down this river and the Amur from people to people, and the trading expeditions which the Goldi, Olcha, and Gilyak from ancient times to now have conducted annually to the Chinese along the Sungari and on which they have had repeated opportunities to become familiar with and to appreciate the type of construction of the Chinese house, must certainly have contributed most of all to its adoption and further spread among the Amur peoples.

G /355/ In April and May, when spring comes, the Gilyak
342 find it necessary to abandon their winter dwellings and to move into their summer dwellings. First the inhabitants of the earth yurts are driven out of their houses, because they are made wet and uninhabitable by the water running in both from the top and the sides as a consequence of the melting snow and the thawing of the ground. The Chinese winter-yurts, set on level ground, are more serviceable, even in spring and summer, though even in them water sometimes comes through or over

G /358 cont./
343 merely an approximately square hole which is just big enough so that a person can go through it in a stooped position, and whose cover is a board that fits it exactly, before which a crosspiece of wood is advanced instead of a bolt (3). The interior of the store-

3. An illustration of the front side of such a storehouse, among other things, will be found below on a plate showing a funeral procession of the Gilyak.

house is usually divided by a partition into two sections, which are connected by a door, so that in it, as the accompanying plan indicates, there are eleven separate, larger or smaller wall surfaces, along which the supplies of fish are stacked.

G /359/ Like the earth yurt, all the pile buildings men-
342 tioned above, the summer yurt, the storehouse, etc., are original,
343 peculiarly Gilyak structures which the neighbors of the Gilyak,
171 the Tungusic Amur-peoples, lack, but which recur among many other Paleo-Asiatic tribes. For example, according to
K [175] Krascheninnikof's and Steller's descriptions and an illustration
[342] given by the latter, the summer dwellings of the Kamchadal are pyramidal huts built on high piles, which are called balagan
000 by the Russians (1). The Eskimo of the American Northwest along

K [113]

1. Krasheninnikov", "Opis. zemli Kamchatki" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 37). Steller, Beschreib. von dem Lande Kamtschatka, Frankfort and Leipzig, 1774, p. 215. Steller also gives the dampness of the air and the ground as the compelling reason for the construction of such "airy dwellings" on Kamchatka. This explains why these peculiar dwellings continued to be retained after the earth yurts, as mentioned above, had already been forced out by Russian-type dwellings.

K [132]

K [178] [179]

342 to ſuffocate any one who is not inured to bear it: but the
417 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 taions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpeeially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

They look upon that river near which their village is situated, as the inheritance of their tribe; and if one or two families at any time desire to live separate from their native village, they build themselves huts upon the same river, or some branch that falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

000 it ſeemed ſufficiently ſheltered, the wind penetrated on every ſide. M. Kaſloff had recourſe to the bath, which quickly reſtored him; but not daring to follow his example, I was obliged to wait the arrival of our baggage. The damp had penetrated to ſuch a degree that I ſhivered during the whole night.

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The next day I made a trial of theſe baths, and can ſay that none ever afforded me ſo much pleaſure or ſo much benefit. But before I proceed, I muſt deſcribe the ſource of theſe hot waters, and the building conſtructed for bathing.

They are two werſts to the north of the oſtrog,[1] and about a hundred yards from the bank of the Bolchaia-reka, which it is neceſſary to croſs a ſecond time in order to arrive at the baths, on account of the elbow which the river deſcribes below the village. A thick and

[Natchikin (Nachiki?)--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

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and continual vapour aſcends from theſe waters, which fall in a rapid caſcade from a rather ſteep declivity, three hundred yards from the place where the baths are erected. In their fall, which is in a direction eaſt and weſt, they form a ſmall ſtream of a foot and half deep, and ſix or ſeven feet wide. At a little diſtance from the Bolchaia-reka, this ſtream is met by another, with which it pours itſelf into this river. At their conflux, which is about eight or nine hundred yards from the ſource, the water is ſo hot that it is not poſſible to keep the hand in it for half a minute.

M. Kaſloff has been careful to erect his building on the moſt convenient ſpot, and where the temperature of the water is moſt moderate. It is conſtructed of wood, in the middle of a ſtream, and is in the proportion of ſixteen feet long by eight wide. It is divided into two apartments, each of ſix

or

7:Lesseps T-3 (1787-88)1790 Kamchadal

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or ſeven feet ſquare, and as many high: the one which is nearest to the ſide of the ſpring, and under which the water is conſequently warmer, is appropriated for bathing; the other ſerves for a dreſſing-room; and for this purpoſe there are wide benches above the level of the water; in the middle alſo a certain ſpace is left to waſh if we be diſpoſed. There is one circumſtance that renders theſe baths very agreeable, the warmth of the water communicates itſelf ſufficiently to the dreſſing-room to prevent us from catching cold; and it penetrates the body to ſuch a degree, as to be felt even for the ſpace of an hour or two after we have left the bath.

We lodged near theſe baths in a kind of barns, covered with thatch, and whoſe timber work conſiſted of the trunks and branches of trees. We occupied two, which had been built on purpoſe for us, and

7:Lesseps T-3 (1787-88)1790 Kamchadal

361/343 from Charom. Vercknei is a very considerable place, compared with the oſtrogs I had hitherto ſeen. I counted more than a hundred houſes. Its ſituation is commodious, and the proſpect round it tolerably various. Beſides bordering upon the river *, it has the farther advantage of being near to woods and fields, the ſoil of which is good, and begins to be cultivated by the inhabitants. The church is built of wood; its architecture is not diſagreeable, and it is only to be wiſhed that the inſide correſponded with the external appearance. The inhabitants differ in no reſpect from thoſe of the other villages. For the firſt time I ſaw at this place a ſpecies of buildings, about the height of a balagan, that ſerve no other purpoſe than to dry fiſh. A ſerjeant had the command at Vercknei, who lives in a houſe belonging to the crown.

* The Kamtſchatka, which was not yet frozen.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun, —a speck of steely blue against the snow beyond.

132 251 343 361 Gumal, with its enormous stores of salmon, seemed, like all these Kamschatkan villages, a place of considerable size. A nearer acquaintance, however, soon dispelled the illusion, and we noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

[P. 92]

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A. A Kamchadal storehouse on posts which serves also as a summer dwelling.
B. Greek-Catholic chapel in the village Kharyusovo.

342 yourt, where the women as well as the
men go in and out by means of a ladder,
or notched beam, that is raiſed to a level
with this opening. There is another very
low entrance in one ſide of the yourt, but
it is conſidered as a kind of diſgrace to
351 make uſe of it. I ſhall terminate the de-
ſcription of the exterior part of theſe habi-
tations by adding, that they are ſurrounded
with tolerably high paliſades, doubtleſs as
a protection againſt the gales of wind, or
falls of ſnow; it is ſaid, however, that theſe
enclofures formerly ſerved as ramparts to
defend theſe people againſt their enemies.

342 We have no ſooner deſcended theſe ſavage
352 abodes, than we wiſh ourſelves out again;
the view and the ſmell are equally offenſive.
The interior part conſiſts of one entire
room, about ten feet high. A bench, five
feet wide, and covered with various ſkins,
half worn out, extends all round it. This
bench

CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtſchadales. 361

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a 342
hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-place is in one of the long ſides of the ſquare: between the 352
pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs.

They enter their huts by ladders commonly placed near the 342
fire hearth, ſo that when they are heating their huts the ſteps 417
of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 626

to

Those of winter are less singular; and if equally large, would exactly resemble the habitations of the Russian peasants. These have been so often described, that it is universally known how they are constructed and arranged. The isbas are built of wood; that is to say, the walls are formed by placing long trees horizontally upon one another, and filling up the interstices with clay. The roof slants like our thatched houses, and is covered with coarse grass, or rushes, and frequently with planks. The interior part is divided into two rooms, with a stove placed so as to warm them both, and which serves at the same time as a fire-place for their cookery. On two sides of the largest room, wide benches are fixed, and sometimes a sorry couch made of planks, and covered with bears skin. This is the bed of the chief of the family: and the women, who in this country are the slaves of their husbands, and perform all the

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7:Lesseps T-3 (1787-88)1790 Kamchadal

562/352 the moſt laborious offices, think themſelves happy to be allowed to ſleep in it.

Beſides theſe benches and the bed, there is alſo a table, and a great number of images of different ſaints, with which the Kamtſchadales are as emulous of furniſhing their chambers, as the majority of our celebrated connoiſſeurs are of diſplaying their magnificent paintings.

342/237 The windows, as may be ſuppoſed, are neither large or high. The panes are made of the ſkins of ſalmon, or the bladders of various animals, or the gullets of ſea wolves prepared, and ſometimes of leaves of talc; but this is rare, and implies a ſort of opulence. The fiſh ſkins are ſo ſcraped and dreſſed that they become tranſparent, and admit a feeble light to the room*;

* They produce an effect ſomewhat ſimilar to the oiled paper in the windows of our manufactories.

but

342 yourt, where the women as well as the
men go in and out by means of a ladder,
or notched beam, that is raiſed to a level
with this opening. There is another very
low entrance in one ſide of the yourt, but
it is conſidered as a kind of diſgrace to
351 make uſe of it. I ſhall terminate the de-
ſcription of the exterior part of theſe habi-
tations by adding, that they are ſurrounded
with tolerably high paliſades, doubtleſs as
a protection againſt the gales of wind, or
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feet wide, and covered with various ſkins,
half worn out, extends all round it. This
bench

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

* Some of the yourts which I ſaw were floored with planks; but this is regarded as a luxury, and the generality have no other floor than the ground.

corner

7:Lesseps T-3 (1787-88)1790 Kamchadal

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

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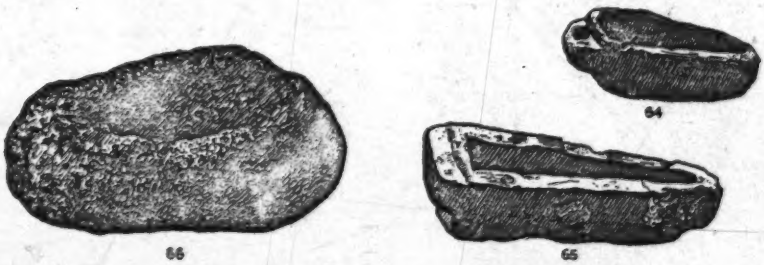
ſingle

CHAPTER VII

STONE LAMPS

171 I discovered 36 stone lamps in excavations in Kamchatka. Some of them were broken. All the types of ancient Kamchadal stone lamps are shown in
● 354 Plates 14 and 15 and text-figures 64 to 66. They are not remarkable for great diversity as to size and form. I mentioned Aleut lamps[1] longer than 310 mm.,
172 and one lamp 1 meter long. There is in the U. S. National Museum at Washington an unusually large stone lamp (No. 90476) from Kodiak Island which weighs 67½ pounds.[2] An Eskimo stone lamp 43 inches long (i. e., somewhat



64. Stone lamp of sandstone.
65. Stone lamp of porphyrite.
66. Stone lamp of andesitic lava, in process of manufacture.
All of Kuril Lake.

longer than a meter), weighing about 50 pounds is in the American Museum of Natural History of New York. Dr. Stefanson saw several larger lamps, but was unable to purchase them from their owners.[3]

354 The Kamchadal stone lamps show the following shapes: circular, elliptical,
172 egg-like and sad-iron in outline. No lamps of rectangular form, like those of the Aleut, and clam-shell shaped or crescentic in outline, like those of the Eskimo of Cumberland Gulf or Point Barrow, were excavated in Kamchatka.

354 Lamp No. 3158 shows the cavity rudely picked out with a hammerstone in the process of manufacture. All the other illustrations of lamps show them in a
324 finished shape and polished. The straight rims of some lamps were chiseled out with hard quartz chisels (see No. 2183). Most of the lamps are flat-bottomed, so
172 they stand without support. The lamp was put on a wooden stand in a somewhat

[1] W. Jochelson, *Archæological Investigations in the Aleutian Islands*, p. 74.
[2] Walter Hough, *The Lamp of the Eskimo*, Annual Report, U. S. National Museum for the year 1897, Washington, 1898, pp. 1027–1057.
[3] See Vilhjamur Stefansson, *My Life with the Eskimo*, New York, 1913, p. 249.

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient

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wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Tyrshov's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. XXXVII, No. 2, St. Petersburg, 1908, in Russian, figures 28 (p. 342) and 29 (p. 342).

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JOCHELSON

PLATE 14

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● 354
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1 (2211). Small lamp of quartz slate. Naiachova Lake.
2 (3232). Cemented fragments of lamp of diorite. Kuril Lake.
3 (3130). Lamp of quartz slate. From Kuril Lake.
4 (3137). Lamp of quartzite. From Kuril Lake.
5 (3138). Lamp of sandstone. From Kuril Lake.
6 (3139). Lamp of quartz schist. From Kuril Lake.
7 (2921). Lamp of quartz schist. From Kavran site.
8 (2922). Lamp of quartzite. From Kavran.
9 (2923). Lamp of quartz slate. From Kavran.
10 (3143). Lamp of quartz slate. From Kuril Lake.
11 (3144). Lamp of quartzite. From Kuril Lake.
12 (3145). Lamp of quartz schist. From Kuril Lake.

Figures 1, 2 half natural size, figures 3 to 12 two-fifths natural size.

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1 (3160). Lamp of andesitic lava.
2 (3161). Lamp of quartz schist.
3 (3162). Lamp of andesitic lava.
4 (3163). Lamp of quartz schist.
5 (3164). Lamp of quartzite.
6 (3165). Lamp of andesitic lava.
7 (3166). Lamp of quartz schist.
8 (3167). Lamp of quartzite.

All specimens from Kuril Lake. About two-fifths natural size.

7:Lesseps T-3 (1787-88)1790 Kamchadal

342 of thatch, or dried grafs, placed upon long
354 poles faftened together at the top, and bear-
511 ing upon the rafters. This is at once the
417 firft and laft ftory; it forms the whole apartment, or rather chamber: an opening in the roof ferves inftead of a chimney to let out the fmoke, when a fire is lighted to drefs their victuals; this cookery is performed in the middle of the room, where they eat and fleep pell-mell together without the leaft difguft or fcruple. In thefe apartments, windows are out of the queftion; there is merely a door, fo low and narrow, that it will fcarcely fuffice to admit the light. The ftair-cafe is worthy of the reft of the building; it confifts of a beam, or rather a tree jagged in a flovenly manner, one end of which refts on the ground, and the other is raifed to the height of the floor. It is placed at the angle of the door, upon a level, with a kind of open gallery that is erected before it. This tree

retains

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 have proceeded from the north, and been very heavy, which was confirmed by the inhabitants. Our road lay invariably through a foreſt of birch trees, and for ſome time we loſt ſight of the mountains, by which we had paſſed the preceding evening; but as we drew nearer to Pouſchiné they became viſible again.

354 The Kamtſchatka runs by the lower end
361 of this oſtrog, which is larger than that of
342 Ganal. The only thing I remarked in this place was, that the iſbas had no chimneys; they have only, like the balagans, a narrow opening in the roof to let out the ſmoak, which is frequently cloſed up by a trap door to confine the heat. It is not poſſible to continue in apartments warmed in this manner; we muſt either come out, or proſtrate ourſelves on the floor, if we would eſcape being ſtifled, or at leaſt blinded, by the ſmoke: it does not aſcend directly towards

7:Lesseps T-3 (1787-88)1790 Kamchadal

354 wards the roof, but ſpreads a thick black
342 cloud over the chamber; and as it ſeldom has time wholly to evaporate, the interior part of theſe iſbas is lined with ſoot, which gives them a diſguſting aſpect and a moſt offenſive ſmell.

354 But it is ſtill leſs unpleaſant than the
356 noiſome odour exhaled from a diſmal lamp, that ſerves as a light to the whole houſe. Its form is not of the moſt elegant kind: it is ſimply a hollow pebble or ſtone, with a rag rolled up in the middle for a wick, round which is placed the greaſe of the ſea wolf, or other animals. As ſoon as the wick is lighted, we are immediately ſurrounded with a dark and thick vapour, which contributes equally with the ſmoke to blacken the whole room: it ſeiſes the noſe and throat, and penetrates to the very heart. This is not the only diſagreeable ſmell that is experienced in theſe habitations; there is

Lesseps T-3 (1787-88) 1790 Kamchadal

342 ground, is like a truncated cone. To
354 form a juſt idea of them, we muſt conceive of a large ſquare hole about twelve or fourteen yards in diameter, and eight feet deep; the four ſides are lined with joiſts or boards, and the interſtices of theſe walls are filled up with earth, ſtraw, or dried graſs, and ſtones. In the bottom of this hole various poſts are fixed, that ſupport the cross beams upon which the roof reſts. The roof begins upon a level with the ground, and riſes four feet above it; it is two feet thick, has a very gradual ſlope, and is made of the ſame materials as the walls. Towards the top is a ſquare opening, about four feet long and three wide, which ſerves as a paſſage for the ſmoke * and an entrance to the

* There is ſuch a continual ſmoke in theſe ſubterraneous habitations, that the opening in the roof is not ſufficient to let it out, and there is therefore in an unoccupied corner of the yourt, behind the fire-place, a kind of vent-hole in an oblique direction. It is called *joupann*; it terminates without, at a little diſtance from the ſquare opening, and is commonly cloſed up with a mat or ſtraw covering.

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

* Some of the yourts which I ſaw were floored with planks; but this is regarded as a luxury, and the generality have no other floor than the ground.

corner

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

[113]

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

[417]

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachtschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

342
[364]
[417]
[101]

/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114
10
[113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

7:Lesseps T-3 (1787-88)1790 Kamchadal

354 wards the roof, but ſpreads a thick black
342 cloud over the chamber; and as it ſeldom has time wholly to evaporate, the interior part of theſe iſbas is lined with ſoot, which gives them a diſguſting aſpect and a moſt offenſive ſmell.

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356 another, in my opinion, much more fetid, and which I never could endure; it is the nauſeous exhalation from the dried and ſtinking fiſh, when it is preparing, when they are eating it, and even after it is eaten. The refuſe is deſtined for the dogs; but before the poor animals get it, every corner of the room has been ſwept with it.

511 The perſons who inhabit theſe dwellings exhibit a ſpectacle equally diſguſting. Here is a group of women, ſhining from the fat with which they ſmear themſelves, and wallowing on the ground amidſt a heap of rags; ſome of them ſuckling their children, who are half naked, and bedaubed with filth from head to foot; others devouring with them ſome ſcraps of fiſh perfectly raw, and frequently putrid. There we ſee others in a diſhabille that is not leſs filthy, lying upon bear's ſkins, chattering to one another, and frequently altogether,

and

7:Lesseps T-3 (1787-88)1790 Kamchadal

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

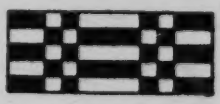
6;Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 *The Coast* extends from the *Bolſcheretſkoi* or Great River to the *Teghil.*

Awatſcha extends from the *Bolſcheretſkoi* to fort *Awatſcha.*

Bobrovoi or *Beaver Sea* is the diſtrict round *Kamtſchatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtſchatka* to the *Teghil.*

Ukoi is the eaſtern coaſt from the river *Ukoi.*

Teghil is the weſtern coaſt from the river *Teghil.*

133 361 563 *Kamtſchatka* is plentifully furniſhed with rivers; however they are ſo little that none of them are navigable by the ſmalleſt veſſels, except the river *Kamtſchatka*, which will carry ſmall veſſels 200 verſts upwards from its mouth. Into this river it is reported that ſome *Ruſſians* were brought by ſea, long before its ſubjection to *Ruſſia.* It is at preſent called *Theodotoſhine*, from the chief of thoſe people thrown a-ſhore, whoſe name was *Theodot.* Next to this, the moſt conſiderable rivers are, the *Bolſchaia-reka*, or Great River, *Awatſcha* and *Teghil*; upon which the *Ruſſians* have ſet-
133 tlements. *Kamtſchatka* is likewiſe very well furniſhed with lakes, particularly about the river of that name, where they are ſo numerous that there is no paſſage over land in the ſummer-time. Some of them are very large: the moſt conſiderable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtſchatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilſkoy*, out of which runs the river *Oſernoi.*

133 712 R 177 .71 The river *Kamtſchatka* riſes in a marſhy ground, and firſt runs north-eaſt; then inclines more to the eaſt, and turning at once towards the ſouth-weſt, falls into the ocean in 56° 30′ north latitude. From its ſource to its mouth, in a ſtrait line, is 496 verſts; but the length of its courſe, according to the exacteſt computation, is about 525 verſts; during which it receives into it many brooks and rivers. About two verſts from its mouth, upon the right ſide, are three deep bays. There are ſeveral forts built along the banks of this river by the *Ruſſian* Coſſacks, to

awe

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

awe and keep in ſubjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtſchatka* on the left ſide, and its head meets that of the *Tegbil.*

The *Tegbil* runs almoſt in the ſame latitude with the *Kamtſchatka*; and the ſtrait road from the one to the other is by the river *Elouki.* Some little forts and ſettlements of the natives are ſcattered here and there upon its banks.

The *Bolſchaia-reka*, or Great River, called by the natives *Kreekſka*, runs out of a lake 185 verſts to the eaſt from its mouth, and falls into the *Penſchinſka* ſea in the latitude of 52° 45′. Its mouth is reckoned to be 555 verſts to the ſouth diſtant from that of the *Tegbil.* It is called Great upon this account, that of all the rivers that fall into the *Penſchinſka* ſea this is the only one which they can navigate from its mouth nearly to its ſpring, and this not without ſome difficulty, on account of its rapidity and the great number of iſlands. At the time of high water it is ſo deep at the mouth that large veſſels may enter; for the water has been obſerved to riſe at full and new moon very little leſs than nine *Paris* feet or four *Ruſſian* yards. It receives a multitude of rivulets; the moſt conſiderable of which is the *Biſtroy* or Rapid River, ſo called from the ſwiftneſs of its ſtream, cauſed by the many ſhoals and cataracts. You may go from the mouth of the Great River to that of the *Biſtroy*, and up within 40 verſts of its head; and from thence over a carrying place to the river *Kamtſchatka*, that ſprings out of the ſame marſh, and runs quite to the Eaſtern Ocean. And though this paſſage muſt be laborious and tedious, upon account of the rapidity of the river, and the many ſhoals and cataracts, where every thing muſt be carried by land, and which would render it impoſſible to advance more than 10 verſts in a day (as I found in my way to *Kamtſchatka* in the year 1739, when the boats were carried over the marſh, about two verſts from the head of the Rapid, to *Kamtſchatka*); yet, conſidering

1:Krasheninnikov N-5 (1736-40) 1764 Kamchadal

361

The Harbour of St. Peter and St. Paul.

The Harbour of Ochotsky.

facing p. 24

177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

101 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and voluntarily pay a tribute in beavers and foxes. The author
651 concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtschadales. 361

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a 342
hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-
place is in one of the long ſides of the ſquare: between the 352
pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs.

They enter their huts by ladders commonly placed near the 342
fire hearth, ſo that when they are heating their huts the ſteps 417
of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 626

to

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

343 their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which
361 are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

773 They look upon that river near which their village is situated,
621 as the inheritance of their tribe; and if one or two families at
423 any time desire to live separate from their native village, they build themselves huts upon the same river, or some branch that
614 falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

fefs any thing more than what they had done voluntarily before.

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity.

CHAP. V.

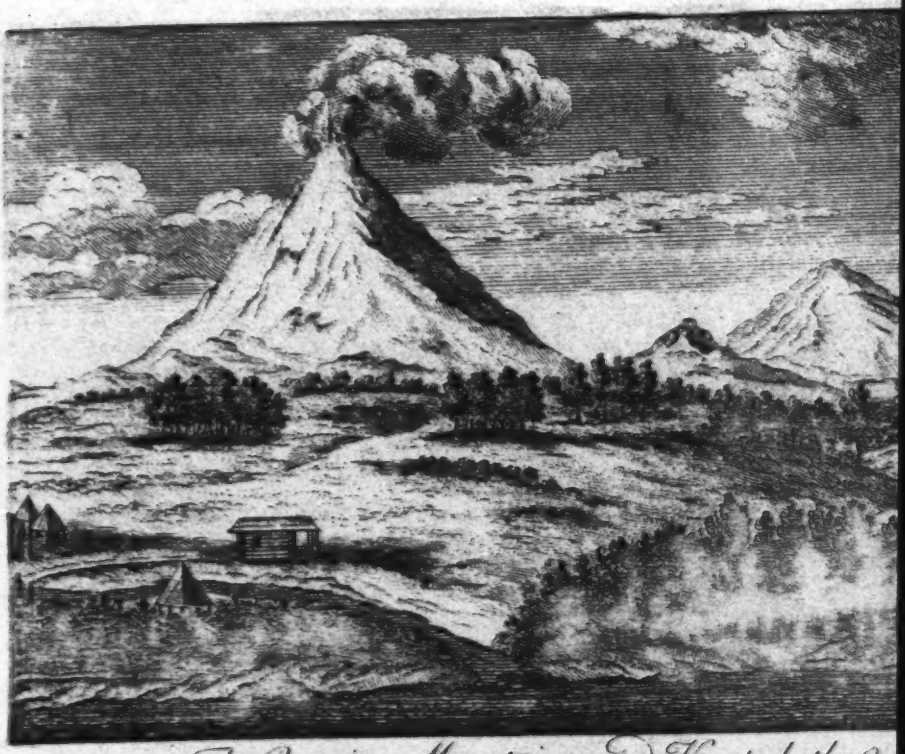
The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.*

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Teghil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

361 different buildings; the entrance into the fort is by a ſmall
663 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about 45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

The

133



The Burning Mountain named Kamtschatka.

361
R.
177
.17

The Lower Kamtschatka Fort.—
Facing P. 265

The upper fort of *Kamtſchatka* was the firſt built, and for ſome years reckoned the principal, as the chief commiſſary lived there. It ſtands upon the left bank of the *Kamtſchatka*, near the mouth of the little *Kaly*, about 69 verſts from the riſe of the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſcheretſkoi* fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper fort, and ſtands upon the ſame ſide of the river, about 30 verſts

from its mouth. The fort is a parallelogram made with paliſades; its breadth is 40, and its length 42 fathoms. In the fort is a church dedicated to the Virgin *Mary*, the office and magazine for the taxes, ſtores, and the commiſſary's houſe. Theſe are all built of larch wood, and much neater than in any other fort. Without the fort are 39 private houſes, beſides the publick houſe and diſtillery. The male inhabitants are 92, of all ranks.

This fort, with regard to the neceſſaries of life, may be reckoned preferable to any other. Here the inhabitants catch plenty of fiſh, which they dry and ſalt in ſufficient quantities for proviſion through the whole year: here they have wood enough, not only for building their houſes, but alſo for building ſhips, to which the river ſerves as an harbour; and by its proximity to the ſea they boil ſo much train oil and ſalt as to ſupply the other forts. Game is here ſo plenty, that the pooreſt Coſſack ſeldom dines without a ſwan, gooſe, or duck; and through the whole winter, in the ſprings, they catch freſh fiſh. Wild berries of all ſorts are here in great abundance, which the inhabitants lay up in ſtore for the winter, and which next to fiſh is the greateſt part of their ſuſtenance; and the beſt *Kamtſchatka* ſables are caught near the river *Tegbil*. All the goods which they get from the *Koreki*, ſuch as deer-ſkins, and even the fleſh of the deer itſelf, are cheaper here than any where elſe: beſides, this is a moſt fruitful ſoil, where they may cultivate corn of all ſorts. The only inconvenience that they have is, that both *Ruſſian* and *Chineſe* goods are dearer here than at any other fort, which is owing to their land-carriage from the *Bolſcheretſkoi Oſtrog* hither, which coſts four rubles a pood.

The fourth fort was built upon the bay of *Awatſcha*, in the year 1740; and inhabitants were brought hither from the upper and lower *Kamtſchatka* ſorts. The houſes are tolerably good, particularly thoſe which were built for the people of the *Kamtſchatka*

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

chatka expedition upon the haven of *Petropaulauſkay*. Its great beauty is its church, which is finely ſituated, and very well built. This fort has almoſt the ſame advantages and diſadvantages as the *Bolſcheretſkoi* fort, with this difference, that here the hunting of the beaver is more convenient; but the water is bad and unwholſome, ſo that they ſend frequently from this bay to the river *Awatſcha* for their freſh water.

We can give no account of the fifth fort, which was built upon the river *Tegbil* after my departure from *Kamtſchatka*. It was garriſoned with 37 male inhabitants. Mr. *Steller* tells us, that this fort was built with a view to reſtrain the ſettled *Koreki*, and for a ſtage to thoſe who travel round the *Penſchinſka* ſea to *Ochotſka*; and, in caſe of neceſſity, to protect the rein-deer or wandering *Koreki* againſt the *Tchukotſkoi*. The inhabitants of this fort can deprive thoſe of the lower *Kamtſchatka* fort of ſeveral advantages, becauſe they lie more convenient for hunting the ſable upon the river *Tegbil*, and the *Koreki* rather chuſe to bring their goods to them than to the two other forts, as being nearer.

CHAP. VI.

Of the Manner in which the Coſſacks live there; of their DISTILLERY, PROVISIONS, *&c.*

THE Coſſacks of *Kamtſchatka* live almoſt in the ſame manner as the natives, feeding like them upon roots and fiſhes; and their occupations are nearly the ſame. In the ſummer they catch fiſh for their winter proviſion, and gather nettles, of which they make nets. Their difference only ſeems to

342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1] 1

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not as high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 188). The storehouse on posts is known everywhere in Siberia, as well as in North America.

1. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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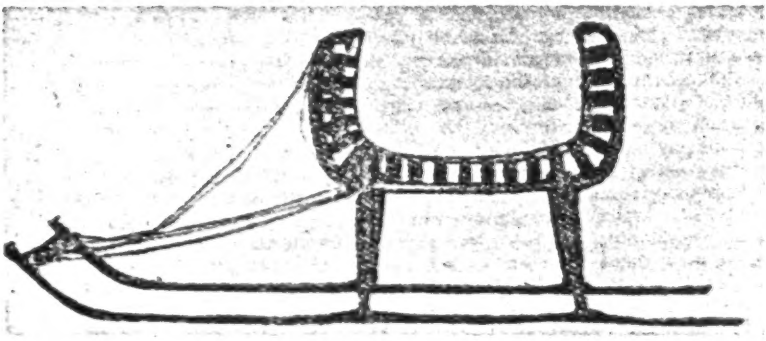

18th-century dogsled.

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[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic technology. "The former Kamchatka metals, almost until the coming of
[321] the Russians, were bone and stones. They were used in the making of axes,
[324] knives, spears, arrows, lancets and needles," Krasheninnikov writes about the Itel'mens. Rock crystal was also widely used for knives and tips.
[372] Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostroshkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 [192]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 attempt by land, and the paſſage by ſea was not leſs dangerous; beſides there was no veſſel either in the port of Saint Peter and Saint Paul, or of Bolcheretſk*.

M. Koſloff had his affairs to ſettle, which, with the preparations for our departure, detained us ſix days longer, and afforded me time to ſatisfy myſelf that the frigates were not likely to return. I embraced this opportunity of commencing my obſervations, and making minutes of every thing
361/712 about me. I attended particularly to the
R bay of Avatcha, and the port of Saint Peter
177 and Saint Paul, in order to give a juſt idea
.71 of them.

This bay has been minutely deſcribed by captain Cook, and we found his account to be accurate. It has ſince undergone ſome

* The navigation is ſufficiently ſafe in ſummer, and is the only mode of travelling that is adopted.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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alterations; which, it is ſaid, are to be followed by many others; particularly as to the port of Saint Peter and Saint Paul. It is poſſible indeed, that the very next ſhip which ſhall arrive, expecting to find only five or ſix houſes, may be ſurpriſed with the ſight of an entire town, built of wood, but tolerably fortified.

Such at leaſt is the projected plan, which, as I learned indirectly, is to be aſcribed to M. Kaſloff, whoſe views are equally great, and conducive to the ſervice of his miſtreſs. The execution of this plan will contribute not a little to increaſe the celebrity of the port, already made famous by the foreign veſſels which have touched there, as well as by its favourable ſituation for commerce *.

To

* According to the accounts of the earlieſt navigators, it is the moſt commodious port in this part of Aſia, and ought to be the general depôt for the commerce of the country. This would be ſo much the more advantageous, as the veſſels which frequent the other ports, commonly conſider themſelves

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To understand the nature, and estimate the utility of this project, nothing more is necessary

selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

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An English ship, belonging to M. Lanz, a merchant of Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had failed, in

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 neceſſary than to have an idea of the extent
712 and form of the bay of Avatſcha, and the
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177 port in queſtion. We have already many
.71 accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

177 in order to begin its cargo, which it expected to complete
439 at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

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ſchatka is built. Upon an eminence to the eaſt, at the moſt interior point of the bay, is the houſe of the governor *, with whom M. Kaſloff reſided during his ſtay. Near this houſe, almoſt in the ſame line, is that of a corporal of the garriſon, and a little higher inclining to the north, that of the ſerjeant, who, next to the governor, are the only perſons at all diſtinguiſhed in this ſettlement, if indeed it deſerves the name of ſettlement. Oppoſite to the entrance of the port, on the declivity of the eminence, from which a lake of conſiderable extent is ſeen, are the ruins of the hoſpital mentioned in captain Cooke's voyage †. Below theſe,

Ruſſians to protect them from the incurſions of the natives, who, doubtleſs, did not paſſively ſuffer their country to be invaded. The appellation of oſtrog is now given to almoſt all the villages in this country.

* His name was Khabaroff, and he had the rank of a *prēporchik*, or enſign.

† At a little diſtance from this ſpot was buried, at the foot of a tree, the body of captain Clerke. The inſcription which

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theſe, and nearer the ſhore, is a building which ſerves as a magazine to the garriſon, and which is conſtantly guarded by a centinel. Such was the ſtate in which we found the port of St. Peter and St. Paul.

By the propoſed augmentation, it will evidently become an intereſting place. The entrance was to be cloſed, or at leaſt flanked by fortifications, which were to ſerve at the ſame time as a defence, on this ſide, to the projected town, which was chiefly to

which the Engliſh placed upon his tomb, was on wood, and liable to be effaced. Count de la Peroufe, deſirous that the name of this navigator ſhould be immortaliſed, without having any thing to fear from the injuries of the weather, ſubſtituted inſtead of it an inſcription on copper.

It is needleſs to mention, that he enquired at the ſame time where the famous French aſtronomer, from the iſland of Croyere, had been buried. He entreated M. Kaſloff to order a tomb to be erected, and an epitaph, which he left engraved on copper, to be placed on it, containing an elogy, and the circumſtances of the death of our countryman. I ſaw his intentions carried into execution after the departure of the French frigates.

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be built upon the ſite of the old hoſpital; that is, between the port and the lake. A battery alſo was to be erected upon the neck of land which ſeparates the bay from the lake, in order to protect the other part of the town. In ſhort, by this plan, the entrance of the bay would be defended by a ſufficiently ſtrong battery upon the leaſt elevated point of the left coaſt; and veſſels entering the bay could not eſcape the cannon, becauſe of the breakers on the right. There is at preſent upon the point of a rock, a battery of ſix or eight cannon, lately erected to ſalute our frigates.

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I need not add, that the augmentation of the garriſon forms a part of the plan, which conſiſts only at preſent of forty ſoldiers, or Coſſacs. Their mode of living and their dreſs are ſimilar to the Kamtſchadales, except that in time of ſervice they have a ſabre, firelock, and cartouch box; in other

reſpects

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 respects they are not distinguishable from the indigenes, but by their features and idiom.

161/361 With respect to the Kamtschadale village, which forms a considerable part of the place, and is situated, as I have already said, upon the narrow projection of land which closes in the entrance of the port, it is at present composed of from thirty to forty habitations, including winter and summer ones, called *isbas* and *balagans*; and the number of inhabitants, taking in the garrison, does not exceed a hundred, men, women and children. The intention is to increase them to upwards of four hundred.

13 To these details respecting the port of St. Peter and St. Paul, and its destined improvements, I shall add a few remarks upon the nature of the soil, the climate, and the rivers.

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000 ſing, and we were treated with the utmoſt hoſpitality; but we had ſcarcely entered when the rain fell in ſuch abundance, that we were obliged to ſtay longer than we wiſhed.

I eagerly embraced this ſhort interval to deſcribe ſome of the objects which I had deferred till my arrival at Bolcheretſk, where, perhaps, I may find others that will not be leſs intereſting.

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The oſtrog of Paratounka is ſituated by the ſide of a river of that name, about two leagues from its mouth *. This village is ſcarcely

Peter and St. Paul; but this cannot take place till the projected improvements reſpecting the port are carried into execution. We cannot help obſerving, that the Engliſh have omitted to mention that there was formerly a church at St. Peter and St. Paul's, and that its ſituation is known by means of a ſort of tomb which formed a part of it.

* This river empties itſelf, as I have already ſaid, into the bay of Avatſcha. The ſhoals, which are commonly

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361 164 133 ſcarcely more populous than that of St. Peter and St. Paul. The ſmall pox has, in this place particularly, made dreadful ravages. The number of balagans and iſbas ſeemed to be very nearly the ſame as at Petropavloſska*.

342 R 177 .34 The Kamtſchadales lodge in the firſt during ſummer, and retreat to the laſt in winter. As it is thought deſirable that

dry at low water, render its entrance impracticable; it is even difficult at high water.

* As I ſtood to examine the Kamtſchadale houſes, I frequently imagined to myſelf the diſdainful ſurpriſe that our French Sybarites would expreſs at the ſight, ſome of whom are ſo proud of their vaſt hotels, and others ſo jealous of their little neat and decorated apartments, where the art of arrangement ſcarcely falls ſhort of the refined luxury of ſuperb furniture. I conceived them to exclaim—How can human beings live in theſe miſerable huts! A Kamtſchadale however, is by no means unhappy in theſe cabins, whoſe architecture ſeem to lead us back to the firſt age of the world; he lives there with his family in tranquillity; he enjoys at leaſt the happineſs of knowing few privations, and of having therefore leſs wants, and has no objects of envious compariſon before his eyes.

they

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000 when in the midſt of ice and ſnow, that I had not to contend with the violence of whirlwinds and tempeſts.

We were about ſix or ſeven hours in going from Paratounka to Koriaki, which, as far as I could judge, is from thirty-eight to forty werſts. Scarcely arrived, we were obliged to take refuge in the houſe of the *toyon*, to ſhelter ourſelves from the rain; he ceded his iſba to M. Kaſloff, and we ſpent the night there.

361 The oſtrog of Koriaki is ſituated in the midſt of a coppice wood, and upon the border of the river Avatſcha, which becomes very narrow in this part. Five or ſix iſbas, and twice, or at moſt three times the number of balagans, make up this village, which is ſimilar to that of Paratounka, except that it is leſs, and has no pariſh church. I obſerved in general that oſtrogs of ſo little

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361 consideration were not provided with a church.

361 The next day we mounted our horses
515 and took the way to Natchikin, another oſtrog in the Bolcheretſk route. We were to ſtop a few days in the neighbourhood for the ſake of the baths, which M. Kaſloff had conſtructed at his own expence, for the benefit and pleaſure of the inhabitants, upon the hots ſprings that are found there, and which I ſhall preſently deſcribe. The way from Koriaki to Natchikin is tolerably commodious, and we croſſed without difficulty all the little ſtreams that fall from the mountains, at the foot of which we paſſed. About three-fourths of the way we met the Bolchaia-reka*; from the ſite of its greateſt breadth, which in this place is about ten or twelve yards, it appears to wind to a conſiderable extent to the north eaſt; we jour-

* A Ruſſian name which ſignifies, *large river.*

neyed

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000 neyed on its bank for ſome time, till we
came to a little mountain, which we were
obliged to paſs over in order to reach the
village. A heavy rain which came on as
we left Koriaki, ceaſed a few minutes after;
but the wind having changed to the north-
weſt, the heavens became obſcured, and we
had abundance of ſnow; we were about
two-thirds of our way, and it continued till
361/515 our arrival. I remarked that the ſnow al-
ready covered the mountains, even ſuch as
were loweſt, upon which it deſcribed an
equal line at a certain elevation, but that
below them no traces of it were yet per-
ceptible. We forded the Bolchaia-reka,
and found on the other ſide the oſtrog of
Natchikin, where I counted ſix or ſeven
iſbas and twenty balagans, ſimilar to what
I had ſeen before. We made no ſtay there,
M. Kaſloff thinking it proper to haſten im-
mediately to the baths, to which I was in-

contributed to make us paſs a moſt comfortable night.

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The next day we fitted ourſelves out early and without difficulty. We arrived in four hours at Apatchin, but our floats could not come up as far as the village, on account of the ſhallowneſs of the water. We landed about four hundred yards from the oſtrog, and atchieved this ſhort diſtance on foot.

This village did not appear to me ſo conſiderable as the preceding ones, that is, it contained perhaps three or four habitations leſs. It is ſituated in a ſmall plain, watered by a branch of the Bolchaïa-reka; and on the ſide oppoſite to the oſtrog is an extent of wood, which I conceived might be an iſland formed by the different branches of this river.

361 I learned by the way, that the oſtrog of Apatchin, as well as that of Natchikin, had not been always where they are at preſent. It is within a few years only that the inhabitants, attracted without doubt by the ſituation, or the hope of better and more commodious fiſhing, removed their houſes to this place. The diſtance of the new oſtrog from the former one is, as I was told, about four or five werſts.

133 Apatchin afforded nothing intereſting. I left it to join our floats, which had paſſed the ſhallows, and were waiting for us three werſts from the oſtrog, at the ſpot where the branch of Bolchaïa-reka, after having made a circuit round the village, returns again to its channel. The farther we advanced, the deeper and more rapid we found it; ſo that nothing impeded our courſe the whole way to Bolcheretſk, where we arrived at ſeven o'clock in the evening,

accom-

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The Bifteraïa, another very rapid river
133 and larger than the Bolchaïa-reka, joins it
361 to the weſt, about the diſtance of half a werſt from Bolcheretſk. It loſes its name at the conflux, and takes that of the Bolchaïa-reka, which is rendered very conſiderable by this addition, and empties itſelf into the ſea at the diſtance of thirty werſts.

We landed at ſeven o'clock in the evening at a little hamlet called *Tchekaſki*. Two iſbas, two balagans, and a yourt almoſt in ruins, were all the habitations I could perceive. There was alſo a wretched warehouſe, made of wood, to which they give the name of magazine, becauſe it belongs to the crown, and firſt receives the ſupplies with which the galliots from Okotſk* are freighted. The hamlet was built as a guard to this magazine. We paſſed the

* When theſe galliots are obliged to winter here, they harbour in the mouth of a narrow and deep river, which pours itſelf into the Bolchaïa-reka, about fifty yards from the hamlet, higher up.

night

000 tended to the ſouth. It appeared to be about two werſts from us, ſouth of the entrance of the Bolchaïa-reka. At the point of land juſt mentioned, we diſcovered the light houſe, and the cot of the perſons appointed to guard the wreck: unfortunately we could only ſee all this at a diſtance. The direction of the river, from the place where it empties itſelf into the ſea, appeared to me to be north-weſt, and its opening to be
133 half a werſt wide. The light-houſe is on
361 the left coaſt, and on the right is the continuation of the low land, which the ſea overflows in tempeſtuous weather, and which extends almoſt as far as the hamlet of Tchekafki. The diſtance of the hamlet from the mouth of the river is from ſix to eight werſts. The nearer we approach the entrance, the more rapid is the current.

It was not poſſible to purſue our voyage; the wind became ſtronger, and the waves increaſed

000very common at this ſeaſon, it is not be wondered at that ſhipwrecks are ſo frequent on theſe coaſts: the veſſels are ſo ſmall as to have but one maſt; and, what is ſtill worſe, the ſailors who manage them, if report may be credited, have too little ſkill to be confided in.

The next day we reſumed our journey, and arrived at Bolcheretſk in the duſk of the evening.

As I forſee that my ſtay here will probably be long, from the neceſſity of waiting till ſledges can be uſed, I ſhall proceed with my deſcriptions, and the recital of what I have ſeen myſelf, or learned from my converſations with the Ruſſians and
361 Kamtſchadales. I ſhall begin with the
563 town, or fort of Bolcheretſk, for ſo it is called, in Ruſſia (*oſtrog*, or *krepoſt*).

It is ſituated on the border of the Bolchaïa-

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361/563 chaïa-reka, in a ſmall iſland formed by different branches of this river, which divide the town into three parts more or leſs inhabited. The moſt diſtant diviſion, and which is fartheſt to the eaſt, is a kind of ſuburb called *Paranchine*; it contains ten or twelve iſbas. South eaſt of Paranchine, is the middle diviſion, where there is alſo a number iſbas, and among others, a row of wooden huts that ſerve for ſhops. Oppoſite to theſe is the guard-houſe, which is alſo the chancery, or court of juſtice*; this houſe is larger than the reſt, and is always guarded by a centinel. A ſecond branch of the Bolchaïa-reka again ſeparates, by a very narrow ſtream, this group of habitations, built without order, and ſcattered here and there, from another at the north-weſt, nearer the river. The river in this part flows in the

* This guard-houſe is likewiſe uſed as a priſon, and even as a ſchool for children. The maſter of the ſchool is a Japaneſe; he is ſkilled in many languages, and is paid by government for inſtructing the children of this country.

direction

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361/563 direction of ſouth-eaſt and north-weſt, and paſſes within fifty yards of the governor's houſe. This houſe is eaſily diſtinguiſhed from the reſt; it is higher, larger, and is built like the wooden houſes of St. Peterſburg. Two hundred yards north-eaſt of this houſe, is the church; the conſtruction of which is ſimple, and like that of the village churches in Ruſſia. By the ſide of it is an erection of timber work, twenty feet high, covered only with a roof, under which three bells are ſuſpended. North-weſt of the governor's houſe, and ſeparated from it by a meadow or marſh about three hundred yards wide, is another group of dwellings, conſiſting of twenty-five or thirty iſbas, and ſome balagans. There are in general very few of theſe latter habitations at Bolcheretſk; the whole do not exceed ten; the iſbas and wooden houſes, without including the eight ſhops, the chancery, and the governor's houſe, amount to fifty or ſixty.

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From this minute deſcription of the fort of Bolcheretſk, it muſt appear ſtrange that it retains ſo inapplicable a name; for I can affirm, that no traces are to be found of fortifications, nor does it appear that there has ever been an intention of erecting any. The ſtate and ſituation, both of the town and its port, induce me to believe, that government have felt the innumerable dangers and obſtacles they would have to ſurmount, if they were to attempt to render it more flouriſhing, and make it the general depôt of commerce to the peninſula. Their views, as I have already obſerved, ſeem rather turned to the port of Saint Peter and Saint Paul, which for its proximity, ſafety, and eaſy acceſs, merits the preference.

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There is a degree of civilization at Bolcheretſk, which I did not perceive at Petropavlofska. This ſenſible approach to European manners, occaſions a ſtriking differ-

ence

000 After a few bad nights, ſleep at laſt overpowered me, and I was inſenſible to all noiſe. By degrees I became ſo inured to the cries of theſe animals, that I could repoſe in the midſt of them in perfect tran-
231 quillity. I ſhall mention in this place, that the dogs are only fed once a day, at the end of their journey; their repaſt conſiſts commonly of a dried ſalmon diſtributed to each of them.

133/361 The oſtrog of Malkin is ſimilar to thoſe which I have already deſcribed. It contains five or ſix iſbas and a dozen balagans, is ſituated upon the border of the Biſtraïa, and ſurrounded with high mountains. I had no time to viſit the hot ſprings that are ſaid to be in this neighbourhood, the waters of which are ſtrongly impregnated with ſulphur; and one in particular, iſſuing from the declivity of a hill, forms at the bottom a baſon of tolerably clear water.

361 From Malkin we went to Ganal, which is forty-five werſts, but we were unable to travel with the ſpeed we had expected. The Biſtraïa was not completely frozen, and we were obliged to wind about and to croſs woods, where the ſnow, though deep, was ſo far from firm, that our dogs ſunk to their bellies, and were extremely fatigued. This induced us to abandon this road, and make again for the Biſtraïa. We came up to it at ten werſts from Ganal, and found it in the ſtate we had wiſhed. The ſolidity of the ice promiſed us expeditious travelling, and we readily embraced the advantage. We followed this river till we came to the oſtrog which is upon its bank, and conſiſts of four iſbas and twelve balagans. It offered nothing remarkable.

1 32 We only learned that there had been ſome very terrible hurricanes, and that they had not yet ſubſided, though their force was con-

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000 have proceeded from the north, and been very heavy, which was confirmed by the inhabitants. Our road lay invariably through a foreſt of birch trees, and for ſome time we loſt ſight of the mountains, by which we had paſſed the preceding evening; but as we drew nearer to Pouſchiné they became viſible again.

354 The Kamtſchatka runs by the lower end
361 of this oſtrog, which is larger than that of
342 Ganal. The only thing I remarked in this place was, that the iſbas had no chimneys; they have only, like the balagans, a narrow opening in the roof to let out the ſmoak, which is frequently cloſed up by a trap door to confine the heat. It is not poſſible to continue in apartments warmed in this manner; we muſt either come out, or proſtrate ourſelves on the floor, if we would eſcape being ſtifled, or at leaſt blinded, by the ſmoke: it does not aſcend directly towards

000 had all the difficulty in the world to diſengage themſelves from the ſnow, which covered them as faſt as they ſhook it off. It was frequently neceſſary to ſmooth it before them, to enable them to extricate the ſledge. This alſo was the office of my guides. To ſupport themſelves upon the ſnow, they each faſtened a racket to one of their feet, and in this manner they ſlid along, reſting now and then their other foot upon the ſkate of the ſledge. I doubt whether any exerciſe can be more fatiguing, or require greater ſtrength and ſkill.

The oſtrog of Charom, at which we had the good fortune to arrive, is ſituated upon the Kamtſchatka: it furniſhed me with no remarks. We paſſed part of the night there, and left it before day.

361 In ſeven hours we reached Vercknei-Kamtſchatka, which is thirty-five werſts from

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361/343 from Charom. Vercknei is a very considerable place, compared with the oſtrogs I had hitherto ſeen. I counted more than a hundred houſes. Its ſituation is commodious, and the proſpect round it tolerably various. Beſides bordering upon the river *, it has the farther advantage of being near to woods and fields, the ſoil of which is good, and begins to be cultivated by the inhabitants. The church is built of wood; its architecture is not diſagreeable, and it is only to be wiſhed that the inſide correſponded with the external appearance. The inhabitants differ in no reſpect from thoſe of the other villages. For the firſt time I ſaw at this place a ſpecies of buildings, about the height of a balagan, that ſerve no other purpoſe than to dry fiſh. A ſerjeant had the command at Vercknei, who lives in a houſe belonging to the crown.

* The Kamtſchatka, which was not yet frozen.

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000 ſenſible of his paſt ſufferings, or weary of his preſent ſituation.

361/563 Our ſtay at Vercknei was ſhort; we ſet out after dinner in order to ſleep at Milkovaïa-Derevna, otherwiſe called the village of Milkoff, which was at the diſtance of fifteen werſts. In our way we paſſed a tolerably large field incloſed with palliſades, and farther on a *zaimka*, that is, a hamlet inhabited by labourers. Theſe labourers were Coſſacs, or Ruſſian ſoldiers, employed in the cultivation of land on government account. They had eighty horſes belonging to the crown, and which equally anſwer the purpoſes of induſtry, and of the ſtud eſtabliſhed in this place for the propagation of animals ſo uſeful and ſo ſcarce in the peninſula. About five hundred yards from this hamlet, which is called Iſchigatchi, upon an arm of the Kamtſchatka, is a water mill built of wood, but not very large. No uſe could at pre-

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563 ſent be made of it. The ſwell of water had been ſo great as to overflow the ſluice, and to ſpread itſelf over a part of the plain where it was frozen. The ſoil appeared to be good, and the country round it to be very pleaſant. I queſtioned the Coſſacs upon the productions of their canton, where I conceived every ſpecies of corn might be cultivated with ſucceſs. They told me that their laſt harveſt had, both in quantity and quality, ſurpaſſed their hopes, and was not inferior to the fineſt harveſts in Ruſſia; two pouds of corn had produced ten.

563 Arrived at Milkoff, I was aſtoniſhed no
361 longer to ſee either Kamtſchadales or Coſ-
241 ſacs, but an intereſting colony of peaſants
R whoſe features and addreſs told me they
177 were not a mixed breed. This colony was
. 24 ſelected in 1743, partly in Ruſſia and partly in Siberia, among the primitive inhabitants, that is, among the huſbandmen. The view

of

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of administration, in sending them into this country was, that they might clear the land and make experiments in agriculture; hoping that their example and success would instruct and encourage the indigenes, and induce them to employ their labours in this advantageous and necessary art. Unfortunately their extreme indolence, which I have already described, little corresponded with the wise intentions of government; and so far are they from pretending to any rivalship, that they have never derived the smallest advantage from the examples that are before their eyes. This extreme sluggishness of the natives is the more painful to an observer, as he cannot but admire the industry of these active emigrants, whose labours have been attended with such beneficial effects. Their habitations, situated upon the Kamtschatka, seem to shew that they live at their ease. Their cattle thrive well from the great care they take of them.

I observed

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nefs is to inſpect the progreſs of agriculture; to preſide over their ſeed time and their harveſt, to fix the preciſe period when they are to take place; in ſhort, to ſtimulate the negligence, or encourage the zeal of the labourers, and particularly to maintain the ſpirit of the eſtabliſhment and a good underſtanding among them.

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Being deſirous of going to Machoure, to ſpend a day with the baron de Steinheil, I left M. Kaſloff at Milkoff, and ſet out twenty four hours before him, that I might occaſion no delay in his journey. To travel with the greater expedition I made uſe of a ſmall ſledge. The reads were no better or leſs obſtructed with ſnow than what we had before experienced, and I was therefore unable to make the ſpeed I intended, notwithſtanding my precaution. The firſt village I came to was Kirgan. Before I reached it, I paſſed a number of houſes and

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balagans

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361 balagans that appeared to be deſerted, but I was informed that the ſummer regularly brought back every year their proprietors. The few habitations which compoſe the oſtrog of Kirgan, are built upon the border of a river called Kirganik, which is formed by a variety of ſtreams that iſſue from then eighbouring mountains, and unite above the oſtrog, fifteen werſts from Milkoff.

The cold was ſo ſevere, that notwithſtanding the precaution I took of covering my face with a handkerchief, my cheeks were frozen in leſs than half an hour. I had recourſe to the uſual remedy, that of rubbing my face with ſnow, and was relieved at the expence of an acute pain that continued for ſeveral days. Though my face was thus frozen, the reſt of my body experienced the contrary effect. I conducted my own ſledge; and the continual motion

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000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

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The oſtrog of Machoure, before the introduction of the ſmall-pox, was one of the moſt conſiderable in the peninſula; but the ravages of this cruel diſeaſe, have reduced the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

000 ſoon puniſhed. After having travelled a conſiderable number of werſts upon the Kamtſchatka, which I had been delighted to find again, and the width of which in this place particularly ſtruck me, I was obliged to quit it and enter a ſort of ſtrait, where the ſnow, driven by the hurricanes, preſented an uneven and deceitful ſurface. It was impoſſible to ſee or avoid the rocks that ſurrounded me. I preſently heard a crack that told me my ſledge was damaged; it was in reality one of my ſkates broken in two. My guides aſſiſted me in adjuſting it in the beſt manner we could, and we had the good fortune to reach Ouchkoff without any other accident. It was midnight, and we travelled this day ſixty-ſix werſts. My firſt care was to refit my ſledge, which detained me till the next day.

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There are in this village one iſba, and eleven balagans; the number of inhabitants

is

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is reduced to five families, who are divided 361
into three yourts. In the neighbourhood 136
is a lake which abounds ſo much with fiſh, 438
that all the villages round reſort to it for their winter ſtock. It is alſo a conſiderable reſource for the capital, which would otherwiſe be almoſt deſtitute of a proviſion of the firſt neceſſity throughout the peninſula.

I left Ouchkoff early in the morning, and 361
at noon had travelled forty-four werſts, partly upon the Kamtſchatka, and partly acroſs extenſive heaths. The firſt village I came to was Kreſtoff. It was a little larger than the preceding oſtrog, but ſimilar in other reſpects to what I had before ſeen. 000
I only ſtayed to change my dogs. Hitherto I had purſued the road which M. Kaſloff was to take to get to Yelofki; but inſtead of proceeding like him to Khartchina, I directed my courſe, upon coming out of

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000 Kreſtoff, towards the village of Klutcheſ-
kaïa, which is thirty werſts from it.

The weather, which, ſince our departure from Apatchin, had been very fine, though cold, changed all of a ſudden in the after-
133 noon. The ſky became clouded, and the wind, which roſe in the weſt, brought us a heavy ſnow. It extremely incommoded us, and prevented me from examining as I could have wiſhed, the volcano of Klutchefskaïa, which I had ſeen at the ſame time with thoſe of Tolbatchina. As far as I could judge, the mountain that carries it in its womb, is conſiderably higher than the other two. It continually throws up flames, which ſeem to aſcend from the midſt of the ſnow, with which the mountain is covered to its very ſummit.

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.24 Upon the approach of night I came to the village of Klutchefskaïa. The inhabi-

tants

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tants are all Siberian peasants, from the neighbourhood of the Lena, and were sent about fifty years ago into this part of the peninsula to cultivate the land. The number of males, including men and children, scarcely exceed fifty. The small-pox attacked only those who had not before been affected with it; but it carried off more than one half of them. These labourers are less happy than those who live in the neighbourhood of Verknei-Kamtschatka. The quantity and quality of their last harvest, both rye and barley, exceeded their hopes. These peasants have many horses belonging to them; in the mean time there are some which are the property of government.

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This ostrog is tolerably large, and appears the more so from being divided into two parts, about four hundred yards from each other. It extends principally from

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eaſt to weſt. To the eaſtward is ſituated the church, which is built of wood, and in the Ruſſian taſte. The majority of houſes are better conſtructed, and are more clean, than any I have yet ſeen. There are alſo ſome conſiderable magazines. The number of balagans is ſmall, and they are very unlike thoſe of the Kamtſchadales; their form is oblong, and their roof, which has the ſame declivity as ours, reſts upon poſts, which ſupport it in the air.

The Kamtſchatka paſſes at the bottom of the oſtrog; it is never entirely frozen in this part. In ſummer it frequently overflows and enters the very houſes, though they are all of them built upon an eminence.

Four werſts eaſt of the church of Klutchefskaïa, is another *zaimka*, or little hamlet, inhabited by Coſſacs or labouring ſoldiers,

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diers, whoſe harveſts belong to government: but I cannot get out of my way to examine it.

I made a very ſhort ſtay at Klutcheſkaïa, my impatience to ſee Nijenei inducing me to leave it the ſame evening in order to reach Kamini, a Kamtſchadale village, twenty werſts farther. I arrived at midnight, but merely paſſed through it.

Before day I was at Kamokoff, twenty werſts from Kamini. I ſoon arrived at Tchokofskoi, or Tchoka, which is twenty-two werſts farther. From thence to Nijenei, the diſtance is the ſame, and I travelled it equally in a few hours. I had the pleaſure of entering a little before noon into this capital of Kamtſchatka, which is ſeen at a conſiderable diſtance, but its appearance is neither ſtriking nor agreeable.

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361/132 It presents to our view merely a cluster of houses, with three steeples rising above them, and is situated upon the border of the Kamtschatka, in a bason formed by a chain of mountains that raise their lofty heads around it, but which are however at a tolerable distance. Such is the position of the town of Nijenei, of which I had a higher opinion before I saw it. The houses, amounting to about a hundred and fifty, are of wood, built in a very bad taste, small, and buried beside under the snow, which the hurricanes collect there. These hurricanes prevail almost continually in this quarter, and have only ceased within a few days. There are two churches at Nijenei, one is in the town, and has two steeples; the other belongs to, and is in the circuit of the fort. These two buildings are wretchedly constructed. The fort is almost in the middle of the town, and is a large palisaded enclosure of a square form. Besides the church,

the

7:Lesseps T-3 (1787-88)1790 Kamchadal

361 the enclosure contains also the magazines, the arsenal, and the guard-house: a sentinel is stationed at the entrance both day and night. The house of the governor, major Orleankoff, is near the fortress, and, its size excepted, is similar to the rest of the houses; it is neither higher, nor built in a better taste.

000 I alighted at the house of an unfortunate exile, named Snafidoff, who had suffered the same punishment as Ivaschkin, nearly at the same time, but for different causes: like Ivaschkin, he had been banished to Kamtschatka ever since the year 1744.

I had scarcely entered, when an officer from M. Orleankoff came to congratulate me upon my happy arrival. He was followed by many of the principal officers of the town, who came one after another in the most obliging manner to offer me their services.

513 their heads, they lay down on their bed as if it were the beſt in the world. As to our dogs, they were unharneſſed, and tied to the trees that were near us, where they paſſed the night in their uſual manner.

The wind having conſiderably abated, we proceeded on our journey before it was light. We had thirty werſts to Ozernoï, where it had been our intention to have ſlept the preceding evening. We arrived at ten o'clock in the morning, but our dogs being extremely fatigued, we were obliged to ſpend the reſt of the day, and even the night there, in hopes that the wind, which began to blow ſtill more violently in the afternoon, would ſubſide during the interval.

361 The oſtrog takes its name from a lake that is near it. The river Ozernaïa, which is but ſmall, runs at the bottom of the village.

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361 lage. The houſe of the toyon was the only ſba I ſaw, and I was informed that we ſhould meet with no more of theſe kind of buildings till we came to the town of Ingiga. There were, however, fifteen balagans and two yourts. I might here deſcribe theſe ſubterraneous habitations; but as they are ſmall in compariſon with thoſe which I ſhall ſoon have an opportunity of examining, I ſhall defer my deſcription for the preſent.

000 We paſſed alſo the 21 February at Ozernoï, in fruitleſs expectation of a ſerjeant of M. Kaſloff's ſuite, who had been ſent to Nijenei-Kamtſchatka.

The next day we reached Ouké at a tolerably early hour, which is only twenty ſix werſts. There we waited again for the ſerjeant, who had been ordered to join us at this place. But he did not come.

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361 There is but one iſba at Ouké, which, together with a dozen balagans and two yourts, form the whole oſtrog. One of the yourts had been cleaned for M. Kaſloff, and we paſſed the night in it.

000 We left this village at break of day, and half way on our journey we ſaw a certain number of balagans, which are only inhabited, I was informed, in the fiſhing ſeaſon. Near this place we met the ſea again, and travelled on the ſhore for ſome time. I was extremely mortified at not being able to ſee at what diſtance it was frozen, nor what was the direction of this part of the eaſtern coaſt of Kamtſchatka. A north wind incommoded us, and impelled the ſnow with ſuch violence againſt us, that our whole attention was engroſſed by guarding our eyes from it; there was alſo a fog that extended from the ſhore to a conſiderable diſtance on the ſea, and intercepted almoſt entirely

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 entirely the view of it. The inhabitants of the country, whom I interrogated upon the ſubject, informed me we had juſt paſſed a bay of no very conſiderable width, and that the ſea was covered with ice as far as thirty werſts from the land.

361 At Khaluli, an oſtrog, ſituated upon a river of the ſame name, ſixty ſix werſts from Ouké, and at a ſhort diſtance from the ſea, I found but two yourts and twelve or thirteen balagans; but I had the pleaſure
281 of ſeeing a baidar covered with leather.
501 This boat was about fifteen feet long and four wide; the hull was made of planks tolerably thin, and croſſing each other; a longer and thicker piece of wood ſerved as the keel; the timbers were made faſt with leathern ſtraps; and the whole was covered over with ſeveral ſkins of ſea horſes and large ſea wolves.

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166 AT TEN O'CLOCK IN THE MORNING WE HAD LEFT
361 ſight of Khaluli, and paſſed an old village of the ſame name, which had been lately deſerted on account of its bad ſituation. Farther on we found ſome more deſolated habitations, formerly the oſtrog of Ivaſchkin, and which had been removed, for a ſimilar reaſon, thirty werſts from its former ſituation. We came again to the ſea, and travelled for ſome time on the eaſtern coaſt. It forms another bay at this place, which I was deſirous of examining, but was, as before, prevented by the fog. I obſerved that the fog cleared up in proportion as the wind veered to the north-eaſt, which had hitherto been weſt and north-weſt.

361 Ivaſchkin is forty werſts from Khaluli, and very near to the ſea. It contains two yourts and ſix balagans, and is ſituated upon a ſmall river of the ſame name, which was entirely frozen, as was alſo one that we had juſt paſſed.

7 Lesseps T-3 (1787-88)1790 Kamchadal

133 ſels may ſafely anchor, and be ſheltered from the ſouth, the weſt, and the north winds: The ſouth of its entrance does not afford ſo good a harbour, as it is ſaid to have various ſand banks; I was obliged to truſt to report, the ice and the ſnow preventing me from obtaining any better information.

361/631 We travelled this day ſeventy werſts, and came in the evening to Karagui, which is upon an eminence, and affords a view of the ſea. It has only three yourts and twelve balagans, at the foot of which the river Karaga paſſes. This river pours itſelf into the ſea at the diſtance of a few gun ſhots from the oſtrog, which is the laſt in the diſtrict of Kamtſchatka; a hamlet a hundred werſts farther, and containing but few Kamtſchadales, not being included within its limits.

As we were obliged to wait here for a

7: Lesseps T-3 (1787-88) 1790 Kamchadal

000 the ſame manner as the preceding, we purſued our journey at three o'clock in the
103 morning. We quitted not the ſea coaſt
361 till we came to Gavenki, which was about ten o'clock. The name of the village is derived from the word *gavna*, which ſignifies excrement; and it is ſo called on account of its deformity and wretched ſtate. There are in reality but two iſbas falling to ruin, and ſix balagans very ill conſtructed of bad and crooked wood, which the ſea leaves ſometimes upon the ſhore; for there is not a tree in the whole neighbourhood, and nothing to be ſeen but a few paltry ſhrubs ſcattered here and there at a conſiderable diſtance from one another. I was not aſtoniſhed to learn, that not along ago, more than twenty of the inhabitants voluntarily abandoned their country to ſeek out a better abode. At preſent the population of this hamlet does not exceed five families, including that of the toyon, and two Kamtſchadales

361 ſchadales from the Iſland of Karagui, who are ſettled there. No reaſon was aſſigned for this removal, and I doubt whether they have gained by the change.

000 We had not been an hour at Gavenki, when a deſpute aroſe between a ſergeant of our company, and two peaſants of the village, to whom he had applied for wood. They anſwered bluntly that they would not give him any. From one thing to another the quarrel became violent. The Kamtſchadales, little intimidated by the threats of the ſergeant, drew their knives * and fell upon him; but they were immediately diſarmed by two of our ſoldiers. As ſoon as M. Kaſloff was informed of this violence, he ordered that the guilty ſhould be puniſhed as an example. They were brought before the yourt in which we were,

* Theſe knives are about two feet long; they are worn in their girdle, and hang upon the thigh.

and

000 onlooker it would seem as if we were deliberately beaching the vessel. "Starboard! hard a-starboard!" comes the order. "'Ard a-starboard," echoes the man at the wheel. "Hard a-port!" "'Ard a-port it is," he sings out, clawing the wheel towards him with foot and hand. "Well! I'm blessed if ever I see the likes of this 'ere place," I hear Jack mutter as we are safely berthed, and, on the whole, I am very much inclined to agree with him.

505 Our arrival created no little excitement among the inhabitants of this remote little spot: it might possibly have created even more had we not entered the harbour almost at the moment of departure of the yearly fur steamer for Japan *viâ* Okhotsk. All Petropaulovsky had assembled to wave their adieux, and not a few of them appeared torn by the conflicting desires of seeing the last of their friends and of discovering the business of the new-comers. 161 The steamer was hardly under way before we were receiving our 361 visitors. They were but limited in number. Petropaulovsky, in 342 spite of the imposing letters to which it is treated in the maps, is, after all, little more than a hamlet, and is probably stationary, if not actually decreasing, with regard to population. Clerke, in 1779, found the settlement consisting of thirty huts built upon the sand-spit to which I have already alluded, and consisting mostly of yourts or balagans.[1] Captain Cochrane, who in 1821 performed the unprecedented feat of walking across Siberia from Russia to Kamschatka, describes it as having increased to fifty-seven buildings, some of which were on the mainland; and at the period of the Crimean war it appears to have been as large as it is at the present time, if not actually larger. The town had been transferred to the head of the little harbour, where it now stands, and boasted of no less than two hundred edifices of all kinds. But in Kamschatka, as in other northern countries, winter storehouses, fish-drying sheds, and other out-buildings are so numerous, that the actual dwelling-

[1] A yourt is a semi-subterranean winter dwelling, roofed with turf. The balagans are only used in summer: they are rough wooden buildings erected on piles. The upper part serves as the dwelling-house, while, beneath, the salmon are hung up in rows to dry.

22: Guillemard T-2 (1882) 1886 Kamchadal

361 houses may be reckoned at about one-third of that number. Kittlitz,
161 in 1829, found the settlement to number about two hundred inhabitants, and at the time of our visit we were informed that there were over three hundred; a number that I should myself be inclined to think overstated.

133 Standing on the now deserted sand-spit,—the natural break-
361 water of the harbour,—the view of the little town and its surround-

PETROPAULOVSKY HARBOUR.

ings is strikingly picturesque. To the left is the wooded promontory, the scene of the unfortunate disaster which occurred to the forces of the Allied Fleet in 1854. On the right a hill of some fifteen hundred feet dominates the town, whose log huts are clustered around the shores of the little bay. Here and there a white-painted house of greater pretension strikes the eye, and a stunted grove of trees shelters the church, and the graveyard studded with Russian crosses. Behind the town, artistically filling in the gap

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

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There are no roads even in the little settlement itself, and, from the irregular distribution of the houses, and the equally irregular ground on which they are built, the traveller has to pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the célebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lessep's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

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22: Guillemard T-2 (1882) 1886 Kamchadal

132 at the base of the low range of hills bounding the plain,—the finger-marks, as it were, of the icy grip of winter.

231 361 We reached Narchiki early in the afternoon, and were greeted by the prolonged howls of innumerable dogs. Though the village boasts of only six huts, there are over one hundred and fifty of these animals to pull the sledges of the inhabitants by day, and to endeavour, in combination with other equally hungry, though happily smaller creatures, to disturb their rest by night. The sledge-dog, indeed, appears to do without sleep, and anything more hideous than their nocturnal concerts it would be difficult to imagine. Fortunately an open-air life and hard work are not generally compatible with insomnia, and after a few nights the traveller would be more apt to miss his music than to abuse it.

133 136 226 Narchiki is placed on a little branch of the Avatcha River, which is here not more than eighteen inches deep. Standing upon its banks we began for the first time dimly to realise the vast numbers of fish which must annually visit the country, and which may be said literally to choke its rivers. Hundreds were in sight, absolutely touching one another; and as we crossed the river our 136 226 horses nearly stepped upon them. Their back fins were visible as far as we could see the stream, and aground and gasping in the shallows, and lying dead or dying upon the banks, were hundreds more. The odour from these decaying fish was distinctly perceptible at a distance of a couple of hundred yards or more. In weight these salmon varied from seven to fifteen and even twenty pounds. They were for the most part foul fish,—blotchy with patches of red and white, and of the kind known by the Russians as the Garbusa;[1] but others in fair condition were to be found, and with a little trouble I was able to pull out three good ten-pound fish in as many minutes with a gaff. Any other method of fishing would have been useless. It would have been nearly impossible to make a cast without foul-hooking a fish, and nine-tenths, or more of them, were in an uneatable condition. Had we wished to do so, we

[1] *Salmo proteus* of Pallas.

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231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 361 491 It was not long before the presence of some large poplars ahead, combined with certain whiffs of decaying fish, to which no description can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 161 177 361 771 793 Gunal is a most picturesquely-situated little hamlet of about twenty huts, and has a population of ninety-four souls, who are all, without exception, the descendants of Russians who established themselves here with Kamschatdale wives in the last century. The latter people are now rare as a pure race, excepting upon the western side of the peninsula. The Gunalians are all Christians, and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

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000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun, —a speck of steely blue against the snow beyond.

132 251 343 361 Gunal, with its enormous stores of salmon, seemed, like all these Kamschatkan villages, a place of considerable size. A nearer acquaintance, however, soon dispelled the illusion, and we noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

Of the number of sables killed annually in Kamchata it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

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114 136 remains of many half-eaten fish lay on the banks. The bears are said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 144 157 161 177 361 Sherowmy, or Sherowm,—for the Kamschatkans are fond of clipping the exuberance of their words, and turn Kamakoffskaya into Kamaki,—is a pretty little village of nine houses and forty-three inhabitants, situated on a branch of the Kamschatka River close to its junction with the latter. To the south lie a few acres of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

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136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kams-
. 72 chatka River that is marked on the English chart of the country. In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

22: Guillemard T-2 (1882) 1886 Kamchadal

563/622 The head-man of the village received us on landing—a person of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167/563/241/361/R Melcova owes its origin to an experiment. With the view of encouraging the cultivation of the land and of making something more of the country than a mere hunting district, where the inhabitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian peasants were settled here in 1743, who were to devote themselves entirely to agriculture. The result has been to a certain extent successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

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563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

22: Guillemard T-2 (1882) 1886 Kamchadal

133 361 484 Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some 000 moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

142 144 164 177 361 Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

22: Guillemard T-2 (1882) 1886 Kamchadal

000 early dawn, with the thermometer below freezing, struggling in an icy river with all one's furs on, but the unlucky bather was soon ashore, and a sharp rub-down at the camp-fire soon restored both his circulation and his equanimity. The day was once more bright and clear, and the distant peaks looked magnificent in the morning sun. As we drew nearer, the mountains opened out, and
133 the western slopes of Tolbatchinska no longer hiding Kojerevska, the latter volcano appeared, from this point of view at least, as a perfect cone of regular shape, which half concealed the equally regular and still higher peak of Kluchefskaya, the king of the volcanoes of Kamschatka. Other mountains too had come in view. To the north and west of Kluchi,[1] but in close proximity to it, the smoothly-rounded summit of Uskovska rose above the dark line of forest, and far away to the eastward two isolated and nameless cones of graceful shape appeared on the horizon, which, in spite of their eight or nine thousand feet, are recorded in no map.[2]

133 At this part of the river the conspicuous marl cliffs disappear,
137 and the pines are replaced by aspens, a tree of which we had
361 hitherto seen but little. Landing in the afternoon to take photographs and observations, we came upon quantities of the *cherunka* or wild cherry. The fruit is black, and of the size of a large black currant; very sweet, but with a peculiar sloe-like astringent after-taste. The delicious Scandinavian *moltebæer* we did not meet with, but our common raspberry and red currant are in some places plentiful. The latter fruit is, in our English gardens, scarcely worth eating, but in the wild state it is very sweet and palatable.

Eleven hours' steady paddling brought us, at 6 P.M., to three deserted balagans, without fish, and with nothing to indicate the presence of a human being save four canoes hauled high and dry upon the bank. We learnt that Tolbatchik, a village that we

[1] To the natives, with their love of contractions, the great mountain is thus invariably known.

[2] These we have since named Mount Gordon and Mount Herbert Stewart.

22: Guillemard T-2 (1882) 1886 Kamchadal

133 expected to find here, is not situated on the Kamschatka, but upon
361 a tributary stream which joins the main river some forty versts lower down. There is a short cut overland, however, and we settled to camp and despatch Jacof Ivanovitch to the village at daybreak on the following morning for a fresh relay of men.
000 Close to the camp we shot a large blue hare, the pats of which were very much developed, and clothed with the thickest fur. This, curiously enough was the only one we met with during the whole journey. The sunset was strikingly beautiful. The eastern sky was a deep purple, and the snowy peaks so bright a rose-colour, that no painter would have dared to transfer them to canvas. But the appearance of the weather was unmistakeable, and we set to work at once to dig deep trenches round the tents in anticipation of the coming rain.

The morning broke as we had foreseen. The wind had shifted to the south, and the rain descended with a steadiness that boded a long continuance. The dull leaden sky reminded us of our native land, and the heavy mist seemed to render even the inside of the tents almost as wet and chilly as the sopping grass without. The natives had retired to their tent, and Verglaski alone, slow and imperturbable as ever, seemed unaffected by the weather. Jacof had started early for Tolbatchik, and there was nothing to be done until his return. We went in search of birds, either for preservation or the pot, but hardly a living creature was to be seen, and a hobby, an owl (*Surnia ulula*), and a small thrush (*T. fuscatus*, Gm.) were the only specimens we obtained. The afternoon, however, was relieved from dulness by our natives, though in a manner that was anything but agreeable, for we found ourselves involved in a renewal of the endless wranglings and discussions of which we had already had more than enough. The Mashura men applied for their money, stating that they wanted to return. Four of them had gone back at Tschappina, but the other four had come on with us, and to these we tendered a sum exactly proportionate to that they had already received for the first part of their journey. This,

22: Guillemard T-2 (1882) 1886 Kamchadal

823 We felt that we had got among friends once more, and managed by
133 the aid of all these luxuries to pass a very pleasant evening, in spite of the cold. At night the beacon flame of Kluchi, now brilliantly illuminating the clouds of smoke that hung around the crater, now sinking almost to extinction, shone out far above our heads. There was an angry look about the volcano, and we were told that its activity had of late been somewhat increased. The explanation was simple. The Kanuli, or Spirits of the Mountains, whose home is in the bowels of the volcanoes, had merely been more fortunate than usual. It is hardly necessary, in these days of omniscience, to explain that it is to these beings that all volcanic disturbances are due. They go to the sea at night to catch whales, which are their favourite food, and the roasting of several of these animals within the crater is, as may be imagined, an operation which requires the consumption of no inconsiderable amount of fuel.

000 The weather had become steadily colder from day to day, and as we turned out on the morning of the 11th September we regretted that the Spirits of the Mountains had not seen fit to do their cooking in closer proximity to our camp. Our moustaches were frozen to the blankets, and the water in the bucket inside our tent was a sheet of ice. Morning observations and photography are always interesting, but they are certainly best appreciated when the thermometer is well above freezing. The view from our camp was glorious, and the mountains, cloudless from base to summit, towered above us with the startling clearness of outline so charac-
361 teristic of northern regions. Kojerevsky—a village of ten huts and
133 sixty-three inhabitants—lies at the foot of Uskovaka, a mountain of nearly 13,000 feet, whose summit from this aspect presents the appearance of a uniformly rounded dome of snow. It is in reality twenty-three miles off as the crow flies, but the giant scale on which Nature works in these regions belittles space to an extent that is inconceivable, until the hard facts of actual measurement are before one. A little farther to the south and east is Kluchi, whose sharp peak rises to a vertical height of 3¼ miles above the

22: Guillemard T-2 (1882) 1886 Kamchadal

133 river, guarded on the right by Kojerevska, which is inferior to it in
361 altitude by fifteen hundred feet. To the extreme right lies Tolbatchinska, and above the intervening stretch of flat forest land the solitary peaks of the two isolated volcanoes I have before mentioned are visible some fifty miles away.

We had but little difficulty in getting the canoes requisite for

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FOX TRAP.

constructing our raft upon somewhat less risky principles than the one that had, thanks to our good fortune, borne us the last seventy miles of our journey in safety. We reverted once more to our old plan of dividing forces, and late in the morning recommenced our voyage amid the firing of many salutes from the guns of the Kojerevskans, to whom we were really sorry to have to
000 bid adieu. At 4 P.M. we reached Uskovska, a hamlet containing

224 At 4 P.M. we reached Uskovska, a hamlet containing
361 thirty souls only. Landing to rest, we noticed here, for the first time, a fox trap of simple construction, which is said nevertheless to be very effective. A broad mortice is cut in an ordinary rough log, and in the longitudinal hole thus produced a spring is placed, composed of two pieces of raw hide twisted together, which impels a barbed prong. This is discharged by means of a trigger, to which a string is attached leading across the animal's usual track. Although Kamschatka is a country which would appear to be peculiarly adapted for trapping, it seemed to us that it was not undertaken to anything like the extent that might be expected.

000 We camped eighteen versts below Uskovska, in good spirits at the improved condition of our affairs and our rate of progress down the river. We had need of them, for after dinner, on inspecting our last case of photographic plates, which had been packed with all possible care in blankets, we found that the greater number of them had been broken to atoms. Such are the results of pack-horse travelling! Of the whole lot but two remained, and these, with one or two we had left over from another case, were all we had to last us for the rest of our journey! It was a cruel disappointment. We were in the midst of scenery which for magnificence was almost without parallel, and which we could never have a hope of seeing again. For some days the volcanoes, which at this season of the year are often invisible, had shown themselves without a cloud. And now, just as we were approaching them, and arriving at the very part of our journey of which we most desired to have a record, we were doomed to failure—a failure the harder to be borne from the fact that our limited time precluded any possibility of sketching.

It was blowing hard from the W.S.W. as we embarked at daylight on the following morning, and before long the wind had freshened considerably. The thermometer was not lower than usual, but the keen wind penetrated our garments and froze us to the bone. It was in our favour, and hoisting a portion of one of the tents as a sail, we sped along merrily. Soon, however, it became evident

22: Guillemard T-2 (1882) 1886 Kamchadal

000 that we could no longer continue our journey. Everything is comparative; and to our craft, with its low free-board and heavy load, the three-inch waves became more formidable than the heavy seas in a gale in "the Bay" appear to an ocean steamer. It would have been too absurd to founder in such a tea-cup storm, so we made for the shore, and set to work to cut down trees till we had to some extent restored the circulation in our limbs. An hour or two later the wind dropped, and we were able to proceed. We noticed the signs of some old forest fires near this spot, but they seem, happily, to be very rare. In Scandinavia, in a journey of the length that ours had been, we should have seen fifty or more. Here the great precautions that are taken against their occurrence are no doubt the chief reasons for their infrequency. Our hunters told us that the sables do not return to these spots for many years after, even if the forest has been but slightly injured by the fire.

361 Late in the afternoon we passed the hamlet of Kristovsky, or
133 Kristi as it was called by our men, and a few versts farther came
484 upon some people encamped upon the banks. It is curious how little the rivers are used as highways either during the winter or summer. The natives can hardly be said to travel at all, excepting in their winter excursions after sable. This was only the second party we had seen away from the settlements, and we were told that no one had passed down the river from Melcova that year. We shouted greeting as we passed, but there was no time to stop, as we wished to reach Kluchi that night. Our Kojerevsky men worked their paddles with a will, and before long we reached the mouth of the Yelofka River, a large stream, eighty yards or more in width, which joins the Kamschatka on its left bank. It flows due south, draining the western slopes of the great Sevelitch volcano, and is used as a road to Tigil, a settlement on the river of that name in the north-west part of the peninsula, which is, or used to be, a trading station of some importance to which the Koriaks
133 and Tchukchis bring in their furs for sale. The river is ascended by canoes for fifty or sixty miles, the watershed is then crossed by

22: Guillemard T-2 (1882) 1886 Kamchadal

000 last rays of the sun and flushed a pale pink, while at the lip of the crater a fleecy puff of smoke hovered for an instant as if in doubt, and then floated out a long thin streamer to the east. Around his shoulders hung a thick belt of cloud, gathering rapidly with the fast-approaching night, and beneath, slope after slope rose steadily up to meet the pyramid above. Kojerevska showed here and there a patch of glistening snow through rifts in the dense veil that hid him from our sight, and on the lake-like surface of the river below our little fleet of boats paddled merrily homewards to the rough and mournful cadences of a Kamschatkan love-song. Suddenly the flame of the first salute shot out from the other raft, the signal for a general fusillade. It was answered by a flash and a report from the village; and a little later we stepped ashore at Kluchi, and were welcomed heartily by the head-man and a little crowd of the inhabitants.

133 137 361 The morning of September 13th broke with hardly a cloud; and the view of the mountains, which now lay nearly due south of us, was so magnificent that I did not hesitate to devote one of my last plates to it. We crossed the river in a dug-out, and landed on a sand-bank near the opposite side. The stream is here six hundred yards in breadth, and forms a fitting foreground to the picture. Behind the village, whose weather-worn huts line the banks for nearly a quarter of a mile,—for Kluchi may be regarded almost as a city in this part of the world,—the even slopes of ruddy vegetation rise smoothly upwards, till, at the height of two 133 or three thousand feet, the snow is reached. The outline of the mighty volcano was as perfect here as before, and its exquisitely graceful slope as unbroken. Near the summit, on the side immediately facing us, a deep furrow, as yet untouched by the rays of the morning sun, showed the remains of some past eruption—a huge scar which the snows of many winters had done their best to obliterate. From the crater light puffs of smoke drifted slowly away to the east, far whiter than the snow which lay below, for on all sides, and especially near the summit, a sprinkling of ashes had

22: Guillemard T-2 (1882) 1886 Kamchadal

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Emerging from the eastern entrance of the narrows we found ourselves passing through a flat, uninteresting plain which extended as far as the sea. Here the scenery is scarcely more interesting than that at the mouth of the Thames. A cold wind swept over the dreary reaches of the river, and behind us an ink-black sky gave warning of approaching bad weather. At 4 P.M. we passed Nischni or Lower Kamschatka, once the capital of the peninsula, a village of some importance with twenty houses and a church, and a population of 150. It lies a little way off the main river upon a smaller stream, and just opposite, upon the other bank of the Kamschatka, the Raduga, a river about forty yards wide at its mouth, flows in from the south. A canoe shot out to intercept us as we passed, bringing a letter for Petropaulovsky from the Kluchi pope, who had left that village just before us on the preceding day, and shortly afterwards we saw another boat paddling hard after us. We stopped to let it approach, and soon recognised Jacof, whose gloomy face told us that Verglaski had not been found. He had apparently gone down the river for some distance, and had then turned back and proceeded towards Kluchi. Here the track had become obliterated, and Jacof had been obliged to give up the search. Poor old Verglaski; his quiet methodical ways had endeared him to all of us, and Jacof was much distressed at his loss. In the summer he would have had no difficulty in finding enough to subsist on, but at this season hardly any fish were left, and the settlements being so far apart, and upon the other side of the river, it was more than doubtful if he would ever have a chance of reaching one of them.

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Paddles were once more resumed, and we were discussing the advisability of proceeding to the mouth of the river without stopping, when we perceived the smoke of a steam launch in the distance. By our glasses we soon made her out to be a stranger, and all doubts as to the arrival of the *Marchesa* were thus at an end. She proved to be the launch of the walrus-schooner *Nemo*, bound to Nischni Kamschatka. She had on board the first officer—

22: Guillemard T-2 (1882) 1886 Kamchadal

000 The captain of the *Nemo*, who was a Swede, and spoke English with perfect fluency, enlivened our row home with his accounts of Saghalin, from which island he had just come. It is now a Russian penal settlement, which is only used for criminals of the worst kind. The discipline adopted, according to his account, was of extreme severity, and many of the prisoners preferred to take their chance of escape, and the almost certain risk of death by starvation in the bush, rather than endure it. In one case he mentioned, two of these unfortunate wretches escaped. One was caught almost immediately, and the other returned of his own accord at the end of some days, nearly dead from starvation. He was fed up until he recovered, and 100 lashes were then administered every day until one of the men died.

361 In Ust Kamschatka, it is hardly necessary to say, there are neither gas lamps nor pavements,[1] and the state of the paths about the settlement—if paths indeed they can be called—is indescrib-
000 able at this season. The captain, who was as good an amateur doctor as he was a Samaritan, had asked me to come and see a sick woman he had been looking after, and we accordingly started at once in search of the hut. It was by no means easy to find it, and we stumbled about over stones and through swamps for some time in vain. In one of the latter my companion lost his boot, and though we expended all our matches in hunting for it, we never saw it again, and he had to see his patient in a condition that was, to say the least of it, unprofessional.

We had been bidden to a feast in the evening. To have one ship in the port was rare enough, but the presence of two was so unprecedented that it was felt that something must be done to commemorate it. A ball was accordingly resolved on. The Swedes sent various intoxicating drinks, as became their nation; and the supper-table groaned with Kamschatkan delicacies—cranberries, brick-tea, and cold ducks. The ballroom was not lofty, and the

[1] Perhaps I may be wrong. I was once asked by a lady, in all seriousness, if the hotels in New Guinea were tolerably good!

22: Guillemard T-2 (1882) 1886 Kamchadal

000 Long before the huge paw had descended in a futile effort at revenge the little rascal was safely under cover, on the look-out for another opportunity, and the bear might just as well have attempted to catch a mosquito. A more thorough little pickle never existed, but, like all pickles, he was very popular, and when one morning he disappeared never to return there was great lamentation among our men. We never learnt his fate. Probably Misky had caught his tormentor after many months of vain endeavour, and had dined off him.

We left Petropaulovsky on September 26th with the intention of visiting the coast towards Cape Lopatka. Even as far south as Avatcha Bay the nights had become bitterly cold, and warned us to take our departure if we meant to avoid the heavy gales that visit these latitudes at the onset of winter. We steamed out of the harbour over a sea so calm that the glare of golden light which lit up the western sky was reflected in its surface as in a mirror. Never had the bay and its grand volcanoes looked more beautiful, and we stood watching the blaze of colour fading over the yellow birch-clad hills and the lonely pyramids of snow beyond until the last ray of daylight had disappeared and the full moon had turned the landscape to a harmony in black and silver.

361 Next morning a thick fog hid the coast from view, but cleared
133 as the sun got up, and we were able to pick up our position. About
noon we found ourselves off an island abreast of the Itterna
501 Volcano, and steaming into a bay close by, we scanned the coast for signs of a sea-otter-hunters' village, of whose existence we had heard through Afanasi. Not a trace of it was to be seen, and we were beginning to think that we had misinterpreted our directions when a couple of little canoes shot out from behind a point and paddled towards us at a great rate. As these neared the ship we saw that they were built somewhat on the model of a Greenlander's *kayack*, although not broader than the narrowest of Thames cedar-wood canoes. How they can live in any ordinary sea is little short of miraculous, but we afterwards learnt from the people that two

22: Guillemard T-2 (1882) 1886 Kamchadal

501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

24: Lansdell-638 [2] M-2 (1879) 1882 Kamchadal
116, 133, 161, 226, 361

" The number of the Kamchatdales, strictly so called, is estimated at 3,000. Their capital is Petropavlovsk, the only town on the eastern coast of the peninsula. (1)

1. It is situated on the right shore of the splendid Bay of Avatcha, which may claim with Rio Janeiro and San Francisco to be one of the finest harbours in the world. It is perfectly protected from the winds, and, transplanted to a more favourable position, it might be one of the greatest of markets; but since the fishery of the whale in the surrounding seas has lost its importance, Petropavlovsk has sunk from a place of 1,000 inhabitants to one of 500. Mr. Dobell, who lived in the peninsula five years, says that he found there many dykes and mounds, from the existence of which he argues that the country was once thickly populated. "

27: Sauer--291 T-2 (1789-93) 1802 Kamchadal
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"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence."

27: Sauer--292 T-2 (1789-93) 1802 Kamchadal
116, 133, 137, 361, 563

"At Tolbalshinsk [CMC: mountain] the mountains are broken and barren; they encroach upon the valley, and considerably lessen its width. Storms are frequent between this volcano and that of Klutshefskoi, but never reach the neighbourhood of Milhovoi, and the trees are considerably less in size; but the country continues fertile as far as 30 versts north of the village Klutshefskoi, which is also a colony of Siberian peasants for the same purpose as those at Milkovoi, and who act in the same manner [CMC: see category 563, this source, p. 291]. Their proceedings are in some respects justifiable; for the magistracy at Neizshni exact the same payment from them as from the residentiary merchants. The court of justice conflicts of a burgo-master, four members, or rathmen, a secretary, writers, and watchmen; receiving a salary for the time they are in service: and frequently an expensive deputation is sent to Tigil, Bolshoiretsk, Virchni, and such places as are reported to by these pedlars; so that it is a matter of doubt with me, whether the culture of the earth would render any harvest sufficient to answer the payment of their claims. In some years they amount to 18 or 20 rubles, and in others half as much more."

27: Sauer--293 T-2 (1789-93) 1802 Kamchadal
116, 161, 361

"I have already mentioned the situation of the town Neizshnoi Kamtshatka, which contains 80 isba's, or houses, with two churches; and its number of inhabitants, including children, 548 souls; latitude 56° 33'."

27: Sauer--293-294 T-2 (1789-93) 1802 Kamchadal
116, 161, 361 Russia
636.71

"The villages on this coast [CMC: i.e., the western coast of Kamchatka] are, Tigilsk, Itshinsk, and Bolshoiretsk (situated on the Tigil, Itsha, and Bolshoia rivers). Of these the former is the most considerable, containing 45 wooden houses, and one church. The Russian charts place it in latitude 57° 55'. This, which they call a fortified town, is surrounded by wooden palisades, and was built in 1752. The num-[294]ber of inhabitants are 338, including women and children. Itshinsk also contains a church, and about 10 houses, with 50 inhabitants. Bolshoiretsk contains 37 houses, and the total number of inhabitants are 235. Beside these, there are eight inconsiderable villages, containing each three or four houses, on the west coast."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]: its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636.71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

28: Sarytschew--61 T-1 (1789-90) 1806 Kamchadal
116, 133, 161, 361

"On the Koschka [CMC: a jutty of land at the entrance to Petropavlovsk harbor; see category 133, this source, pages 60-61] there are eight dwelling-houses, interspersed with several buloganen; or log-houses, and on the north shore of the haven are four, together with a wooden building for an hospital, and the store-houses built during the expedition of Commodore Behring, which are still in good condition. The number of the inhabitants is limited to eleven Kamtschadales, one ensign from the army, and 23 Kosaks. The country around the haven is mountainous, but the north and east sides have sufficient level ground for 300 houses."

28: Sarytschew--65-66 T-1 (1789-90) 1806 Kamchadal
116, 361, 563

"The fortress of Bolcherezsk, situated on the banks of the Bolschaja, has a church and thirty habitations. Its inhabitants consist principally of Kosaks, with a few merchants and citizens. Before the advancement of the fortress Nishne-Kamtschatzsk to the rank of a town, the first magistrate of Kamtschatka made this his place of residence; but now a serjeant is commander of the fortress. The Kosaks here are much more opulent than those of Petropaulowsk, almost all of them having their cattle and a good domestic economy. Their gardens are stocked with excellent turnips and potatoes. For the introduction of the latter vegetable they are indebted to counsellor Reineke, the former commander of Kamtschatka.

All the inhabitants here are usually dressed like the Kamt-[66]schadales, in narkas and kamlegas. The former are the skins of reindeer, cut into shirts; and the latter are skins of any kind, stripped of their hair, and made quite pliant. On holidays, the women wear a sort of silk gown of an old Russian shape, which was fashionable 60 years ago. They have also a speckled silk handkerchief about their heads.

In the first days of the new year, the inhabitants assembled every evening for the purpose of dancing. The women understood Russian dances very well, and what was still more surprising, could dance in the Polish fashion, and very passably even à la Grecque. The music consisted of three fiddles, played by Kosaks."

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000 ter which, on a beautiful frosty moon-light morning, I resumed the journey over a picturesque and mountainous country, well wooded and watered. Late at night we reached a small place called Apachinsk, forty-five miles. Ere we arrived we had to cross the river called Bolshaya in a canoe, the river not being frozen, a circumstance at this time of the year very
361 rarely known. Thirty-miles farther we reached the
161 ancient capital of Kamtchatka, Bolcheretzk, now a small village containing fourteen dwellings, one hundred and sixteen inhabitants, and about thirty
000 balagans, i. e. sheds for drying fish. The path to it was over a flat level along the river. I was myself the driver towards the abode of my now father-in-law, whose homely manners, numerous, healthy, smiling children, and hearty breakfast, made ample amends for the fatigues of the last two days.

Bolcheretzk stands on the river of its own name, about fifteen miles from the sea of Okotsk, and has little to boast of at present but the affectionate remembrance the inhabitants bear to the memory of Major Behm, so highly spoken of by Captain King. I heard, also, strange stories of the celebrated Benjofsky, who made his escape hence to Canton, having previously murdered some people, and fomented an insurrection. I heard nothing in his favour, although an old lady, afterwards my aunt,
563 was a companion of his. I found Bolcheretzk to be inhabited by a civil people, all Russians: but
000 were it otherwise it might be expected I should

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000 those I had, and then proceeded upon my journey, reaching by midnight Kickchick, twenty miles, a place of equal wretchedness with the last, and like it containing but fourteen or fifteen inhabitants, most of whom are disabled from work by disease. With the same dogs I reached Kolofsky ostrog thirty miles along the sea coast, upon which a tremendous surf was roaring with a strong northwest wind. There are in the neighbourhood several fine lakes which never freeze, and produce trout and salmon peal of a fine flavour during the whole of the winter. Deer, mountain sheep, and game of every description that is found in the Peninsula abound in the mountains and forests, and fine meadow lands every where skirt the coast.

133 I remained to take tea with the old Toion, whom
563 I found to be a fiddler and a scholar, and depart-
361 ed for Vorofskoy ostrog, forty miles. The mountains now approached nearer to the sea-coast, and present some beautiful scenery. I put up at the abode of a wealthy Russian farmer, and felt highly gratified
161 in observing a small but fat herd of cattle. This is
361 considered a rich spot, yet it contains only nine
133 dwellings with about forty inhabitants, not enough to keep up the chase. The place is prettily situated on the Vorofskaya river, about four miles from the sea. There is a snug harbour at the mouth of the river, where the transports from Okotsk formerly visited, and the river is navigable to the village which retains the vestiges of a small fortress. The meadow lands about it are at once

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133 extensive and luxuriant. The inhabitants provided
361 me with frozen fish, a delicacy I had so much en-
161 joyed on the Kolyma, with ducks and rein-deer meat, as also with dogs to resume the journey, which carried me to Kolpakofskoi ostrog, thirty miles, along a dreary sea beach. The village contains six dwellings and twenty people, who furnished me with dogs to Kroutogorova thirty miles further, a beautiful situation near the extremity of the almost level plane reaching from hence to Bolcheretzk. The famous Sopka, i. e. burning mountain, near Tchinsk, here becomes visible, and although the country is so rich, not a head of cattle is to be met with from Vorofskaya.

To Tchinsk are thirty miles of superior country, yet so deep in snow that we were obliged to take it by turns to go a head with snow shoes, at other times the government of a narte was thrown upon me, which I at first made but a bungling hand of. Tchinsk has twelve dwellings, it is consequently a considerable place! there are also two priests, brothers, whom I found drinking a
576 decoction of dried herb instead of tea. I felt angry with the Toion who had let slip eight dogs intended for me, and declined entering his dwelling, the strongest mark of displeasure which can be shown to these simple people. The poor fellow felt the slight so severely as he saw me entering another yourte, that I could not help regretting the deter-
361 mination I had made. To Soposhna it is thirty-five miles, which I travelled in company with the

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361 reverend pedlers, for every body here is a mer-
161 chant. I made them happy by a pound of tea, a
133 few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

487 At midnight I continued on for Kovranskoy os-
R trog, twenty-two miles. There is here a law oblig-
177 ing the Toions to have a path made within twenty-
.48 four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

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quently was obliged to go before upon his snow shoes; and such was his diligence from fear of reprehension, that he not only arrived before me, but arrived in five hours, a very short time to accomplish such a journey upon snow shoes. I found it the most miserable place I had seen for a long period, reminding me of Zashiversk in northern Siberia. The brows of the hills are covered with brush wood, with little other appearance of nature.

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From hence to Uskolofskoy ostrog are thirty-five miles, which I was obliged to do by walking and alternately driving a narte, and cannot say which of the two is the most fatiguing. The diseases prevalent in the place prevented almost any assistance being rendered us. There are no cattle, yet fine meadow lands. Fish and game are abundant. At this place I met with another old shipmate in the person of the brandy contractor, who accompanied me to the next station, Napanas, a village with six dwellings and forty people. The road leading to it is considered dangerous, owing to a large toondra or swampy desert which must be crossed; the distance is forty miles. We passed the desert in a slight fall of snow, which had not been sufficient to obliterate the marks of the track, else we must have been compelled to halt whenever the snow overtook us. I did not arrive until two o'clock in the morning, having been previously hurled down a snowy declivity of one hundred feet in depth: at the bottom of which, I, guide, dogs and narte all lay huddled together; however vexed I felt inclined to

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133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer,
but its situation in winter is exposed and dreary. A
range of mountains from the NE to the SE defend
it in some degree from the coldest winds, yet it is
on the whole but a poor place. There are at pre-
sent twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word
comprehending Siberian fortresses, says, "It would
be dangerous to attempt storming them, for who-
ever wanted to mount the greatest and only bul-
wark, a wooden paling, would most probably come
to the ground with the whole structure about him."
Such I am certain is the present state of Tygil,
and which, with its half dozen Cossacks, can only
be held *in terrorem* over the neighbouring Koriaks:
the Kamtchatdales are not a people numerically or
physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hos-
pital erected; when they are to be covered in I
know not, though shortly I hope, for they are
much wanted. The ravages of a certain disease
at this place are indeed dreadful, and I should
think ought to call forth the attention of the govern-

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361 ment so far as to induce them to export doctors to,
563 and import priests from Kamtchatka. I mean no disrespect to those reverend gentlemen, but just to hint, as my opinion, that instead of the soul only, it would be better to take care of the soul and body at the same time. The average number of people annually admitted to the hospital books is three hundred and fifty, nearly twice its whole population, who are chiefly employed in fishing and trading with the neighbouring Koriaks or Kamtchatdales. The place also serves to keep up the winter communication with Okotsk. For the Koriaks will not furnish rein-deer or dogs to carry the post, unless they are remunerated by a present of tobacco, spirits, &c.

000 From what I have seen of the Koriaks, both in Tygil and in their encampments to the southward, I have no doubt of their being of the same tribe as the Tchuktchi; they have the same features, manners, and customs, and the same language—the same love of independence, and are, in truth, less scrupulous of giving offence to the Russians than their northern neighbours, for they frequently break out in hostility with the inhabitants of Tygil, unless a supply of spirits and tobacco is sent to them, for which, however, they barter reindeer and furs.

132 The climate of Tygil is cold; already had the
563 thermometer passed 28° of Reaumur. The Cossacks however, contrive to raise a few vegetables, as po-

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563 tatoes, cabbages, turnips and radishes; but the two
137 former never arrive at complete maturity, the one being waxy, and the other without a head. The famous antiscorbutic cheremsha, or wild garlick, abounds, as does a small but delicious root, somewhat resembling a sweet potatoe, called, in the language of the country, kimtchiga. There is also an abundance of wild berries in the neighbourhood of Tygil, yet their chief support is fish and rein-deer, of both which I partook at the hospitable table of
000 the commander of the fortress. At the expiration of four days I departed, having remained so long to recover my feet, which had been severely frost-bitten from wet.

I was accompanied by the commander of the transport lying in the Haven: he was what is termed a good, though a droll, fellow; and I was
133 gratified with his society. Our route lay at first
361 up the Tygil, which from its source to near the town runs through an interesting country. At midnight we reached Sedanka, a small village, containing six dwellings. From thence to Bolcheretzk is called the Tygil coast, which, generally speaking, is low and flat, the sea-coast being from thirty to forty miles from the mountains. The villages through which I had come were all of them upon the banks of some small streams, which, in most cases, rise in the mountains; but sometimes they emanate from the lakes, which are numerous. The rivers I do not apprehend to be

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000 part of the evening we reached the Yelofka river, which unites not far hence with the Kamtchatka, running in a picturesque manner through the coun-
361 try. At seven we reached the ostrog of Yelofka,
161 fortunate in having crossed the mountains so safely.
133 Yelofka is a pleasant village of eight dwellings and forty-six people, the country round it is elevated and well wooded. We remained only a few hours to refresh ourselves, and then continued the journey along the river of its own name, the banks of which afford some beautiful scenery for about fifteen miles. We then came to a desert which we crossed in a purga, fortunately not very heavy. At forty miles we reached the village of Khartchina of
000 five dwellings and thirty inhabitants. I was welcomed to it by a respectable looking old man, a priest, son to the highly eulogized priest of Paratounka. The son perfectly well remembered Captains Cook and Clerk; he having been at that time a young man, living with his father at the village of Paratounka. Several uninteresting anecdotes were related of them, as also of Perouse, in their rambles of shooting or chasing the wild animals. I had at Yakutsk been recalled to the remembrance of Captain Cook by a silver watch, which now belongs to Captain Minitsky, of the Russian navy, and which, I think, is spoken of somewhere as having been given away by that great navigator to some individual merchant. He probably disposed of it, and thus at last it has fallen into the hands of the pre-

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000 sent holder, who, though I feel assured he appreciates it highly, yet would not retain it, should relations, or others more nearly concerned, express a desire to be possessed of so valuable a memorial.

133 From Kharchina the route lies over a large lake,
137 and thence over a fine open country, abounding
361 with some of the finest fir-trees I have ever seen, reaching to the height of sixty and eighty feet. At twenty miles we reached the ostrog of Kamennoy, on the right bank of the Kamtchatka, and, changing dogs, proceeded twelve miles farther to Kama-
136 kie over numerous lakes near the river. The coun-
361 try here abounds with red foxes, and is certainly one of the most picturesque parts of the Peninsula: the beautiful view of the Sopka, or Peak of Cliuchie, was hid in the clouds. I movedon to wards Nishney Kamtchatsk, also an antient capital in the Peninsula, a far more eligible place than the pre-
000 sent site. The weather had now become very mild, no less than 3° of heat of Reaumur. We made good about seven miles of our journey through very deep snow by the ensuing morning. For three hours we did not move forward more than one mile, a heavy fall of snow had taken place, and it was found impossible to proceed, owing to the extraordinary heat of the weather. No track nor scent offered to the dogs, otherwise I would have persisted in the prosecution of my journey. The drivers, however, with snow shoes actually sunk eighteen inches deep in the snow, and I was therefore com-

000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

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133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
.65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.

563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

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563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

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164 havoc the introduction of the small pox, and another distemper, made at the ostrogs on the banks
000 of the Kamtchatka. Remarkably fine and extensive meadow lands, attend the traveller all the way from Cliuchie to Kozerofsky, as well as noble forests of timber; and there are seasons when cattle might maintain themselves during the whole of the winter, the snow being then of no great depth; yet there are but few heads of these necessary animals. The scenery to the southward along the banks of the river, is also of the most picturesque and sublime appearance. The magnificent peak soaring to the clouds has a fine effect when viewed from the bed of the river.

361 Kozerofsky, forty miles beyond Oushkielova,
161 contains five dwellings and thirty-six people, and is pleasantly situated. I continued along the river Kamchatka for twelve miles, and then along that of the Tolbachinsk to an ostrog of the same name for thirty miles more. The latter part of the journey was through a crowded forest, and a thick fog, which occasioned me some serious blows, as the dogs made their rapid progress; now and then starting at the scent of a fox or sable. Tolbachinsk is a pretty little village with thirty inhabitants, and appears to be on the improvement; the establishment is a new one and almost secluded from the world. Stchappinat was the next village I came to. It is upon the Kamtchatka, at a deep and narrow part of the river which was not yet frozen

137 enough to bear the nartes. I crossed two other
small rivers by bridges for that reason. The scenery
was very beautiful, a lofty range of mountains lay
to the east with a good deal of fine timber, while
the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

361 ants received me next, a neat place abounding in
563 cattle, if thirty or forty of them may constitute an abundance; there are however no animals of the chase. A handsome church has of late been erected under the auspices of Captain Golenistcheff, the second in command of the peninsula, whom I found expecting my arrival. I continued for Verchney Kamtchatsk, also a peasants' village, but was obliged to return owing to the inefficiency of the
361 dogs, although distant only eight miles; I at length
563 reached it much fatigued, having come through
R a pretty place called Schegatchik, where some Cos-
177 sacks are stationed to take care of a few heads of
. 23 horned cattle, and four or five horses, which belong to the government. The situation is beautiful, on a branch of the Kamtchatka, which makes a semicircular indentation into the land, just opposite to Verchney Kamtchatsk, forming an island opposite to the junction of the Gatchick and Milkova.

000 I procured fresh dogs at Verchney, a place on the decline, and proceeded towards Sherom twenty miles, situated in one of the most romantic and enchanting valleys in the peninsula. I there met with the Ispravnick and eighteen nartes engaged for the collection of the yasacks, public and private, as well as for trade. I felt gratified to meet them, as I received good news of my affairs at the seat of government; and learnt also that there was a road before me to cross the desert, lying towards Malka. The Ispravnick had been detained four-

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574 I continued on for Pouschin, twenty miles, and
576 arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

133 plane, very subject to storms and heavy falls of
132 snow. I reached the place at nine in the evening.
The inhabitants, amounting to thirty-two, live in
161 four yourtes, and are all afflicted with the disease
164 so common to the peninsula; and the contagion, and
262 want of medicine have been so great, that even the
361 children are equally afflicted, and the complaint of scrofula is become hereditary. In this part of the peninsula the chase is scarce, and the inhabitants mostly subsist upon fish, a few mountain sheep, and wild rein-deer, being the only meat they taste from one end of the year to the other. The situation is fine and highly productive in fish, but at this moment there are not a sufficiency of people to transact the ordinary business; a circumstance which calls aloud for the compassion of the chief.

133 From Ganal to Malka are thirty miles, the first
361 ten of which are over a sterile mountainous country, which is more than compensated by the succeeding richness of a valley eighteen miles in length. I crossed several times the Bistra, a rapid stream, uniting with the Bolshaya Reka, and was again obliged to become pilot, chief, and dog-master; however, I managed very well, and arrived early. Malka is deserving of little notice, yet is said to be celebrated for its baths! The situation is magnificently grand; the hospital stands in the bosom of a lofty chain of elevated mountains at two miles from the village. I was welcomed by two old acquaintances, both of whom
[of Ganal village--Analyst]

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

22: Guillemard T-2 (1882) 1886 Kamchadal

211 There are no roads even in the little settlement itself, and,
361 from the irregular distribution of the houses, and the equally
363 irregular ground on which they are built, the traveller has to
493 pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the celebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lessep's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

[Petropavlovsk--Analyst]

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The channel between the *Kurilskaya Lopatka* and this island is 15 versts in breadth; over which they pass in small boats, when the weather is fair, in three hours. This passage requires not only fair weather, but likewise a flowing tide. In the time of the ebb, the waves spread for some versts, are rapid and white, and so large that even in calm weather they rise two or three fathoms high. Both the Cossacks and *Kuriles* have a superstitious awe and veneration for these waves; and when they row over them, offer them a sacrifice by throwing chips made on purpose, imploring a safe passage; the pilots also use conjurations the whole way. 133 123 782 777

The second *Kurilskoy* island, *Paromusir*, is twice as large as the first. It lies north-east and south-west, and is separated from the first by a channel two versts broad, where one vessel may lie in time of necessity, but not without danger, there being no proper place for anchorage: and if a vessel parts from her anchor, she will be in very great danger; for the shore here being steep and rocky, and the channel narrow, it is next to impossible for her to escape. There was a melancholy example of this in the year 1741, when one of our vessels was cast away here. This island is also mountainous, and has as many lakes and rivulets as *Schumtschu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are used by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the shore by the waves from *America* and *Japan*; among these are sometimes found pieces of ranfarn wood, of which several large one's were brought thence to me. The inhabitants of this island are right *Kuriles*, who came there from the island *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned islands, and the most remote, commerce was formerly established 133 137 372 313 342 [101] 177 439

The birches of

137 *Kamtſchatka* are much fuller of knots and hard excreſcences
322 than thoſe of *Europe*; but of theſe knots they make very uſeful
313 plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white
372 poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſ-*
137 *chatka*. The bark of the ſallow is uſed for food, and that of
262 the alder in dying their leather; as ſhall be related more at large
222 in another place. They have the tree tcheremough‖ and the
314 hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

137 Their principal nouriſhment is from the nuts of the ſlantza,
262 which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthus fructu rubro et nigro.
** Sorbus.

the

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

824 291 842 782 372 roll it[1] about their legs, and it ſerves for ſtockings. The women wrap it round their bodies, from an opinion that the warmth promotes fruitfulneſs. It ſerves to light their fires, being eaſily kindled. On great holidays they bind garlands of it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 283 Few plants are of more general uſe than the nettles; for being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

372

Method of producing Fire.

opposite p 184

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

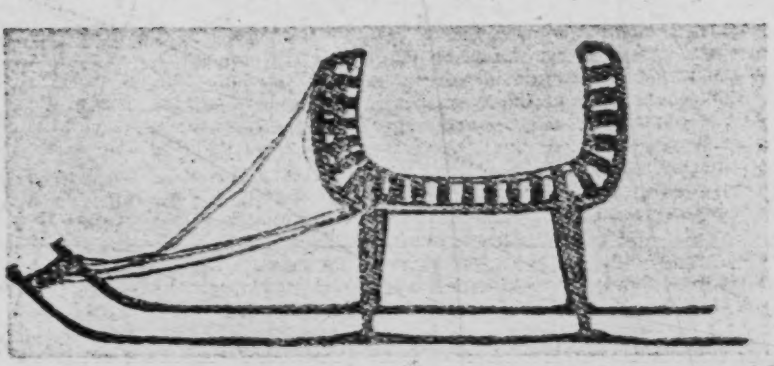
412 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
415 they are ingenious enough to make ſpears and arrows out of the
R. iron pots and kettles which they buy; and they are ſo dextrous
177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
489 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

7:Lesseps T-3 (1787-88)1790 Kamchadal

252 properly ſpeaking, become perfectly pu-
262 trified. It is only in this ſtate of corruption that it attains the flavour moſt pleaſing to the delicate palates of theſe people. In my opinion the infectious odour that exhales from this fiſh, would ſuffice to repulſe the moſt hungry being; and yet a Kamtſchadale feeds voluptuouſly upon this rotten fleſh. How fortunate does he conſider himſelf when the head falls to his lot! this is deemed the moſt delicious morſel, and is commonly diſtributed into many parts. I frequently wiſhed to overcome my averſion, and taſte this ſo highly valued food; but my reſolution was unequal to it; and I was not only unable to taſte it, but even to bring it near my mouth; every time I attempted, the fetid exhalation which it emitted gave me a nauſea, and diſguſted me inſuperably.

262 The moſt common fiſh in Kamtſchatka
372 are trouts, and ſalmon of different ſpecies;

ſea

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 372 ſea wolves are alſo eaten; the fat of this fiſh is very wholeſome, and ſerves them beſide for lamp oil.

136 252 262 Among the vegetables which are made uſe of by the Kamtſchadales, the principal are *ſarana* root, wild garlic, *ſlatkaia-trava*, or ſweet herb, and other plants and fruits nearly ſimilar to what are found in Ruſſia.

The *ſarana* is known to botaniſts*. Its ſhape, its ſize, and its colour have been deſcribed at large in the third voyage of captain Cook. Its farinaceous root ſerves inſtead of bread†. It is dried before it is

* By the name of *lilium flore atro rubente*.

† The Coſſacs uſe rye alſo, which makes a ſort of black bread, like that of the Ruſſian peaſants. Government allows them a certain quantity of rye flour, but it is inſufficient, and they are obliged to procure more at their own expence. Some of them lay it up in ſtore in order to profit by its future ſale.

uſed;

29:Cochrane T-2 (1821-22) 1824 Kamchadal

437 Chief, and conducted to the warmest and cleanest
563 part of the yourte. His upper garments are taken
374 from him, cleared of the snow and put out in the
661 open air for the night; it being understood that
R the colder the dress is put on in a cold country,
177 the warmer it ultimately becomes. The landlady, or
.66 Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

000 I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

381 They make glue of the dried ſkins of fiſhes, and particularly of the whale-ſkin. A piece of this they wrap up in birch bark, and laying it for a little while in warm aſhes they take it out; and it is then fit for uſe, and to me ſeems as good as the beſt *Yaick* glue.

CHAP. VII.

Of their DRESS.

291 THEIR cloaths, for the moſt part, are made of the ſkins of deer, dogs, ſeveral ſea and land animals, and even of the ſkins of birds, frequently joining thoſe of different animals in the ſame garment. They make the upper garment in two faſhions; ſometimes cutting the ſkirts all of an equal length; and ſometimes leaving them long behind in form of a train. They are made of deer-ſkins, with wide ſleeves of a length to come down below the knee: there is a hood or caul behind, which in bad weather they put over their heads below their caps: the opening above is only large enough to let their head paſs: they ſew the ſkins of dog's feet round this opening, with which they cover their faces in cold ſtormy weather, and round their ſkirts and ſleeves they put a border of white dog-ſkin: upon their backs they ſew the ſmall ſhreds of ſkins or ſilk of different colours. They commonly wear two coats; the under coat with the hair-ſide inwards, the other ſide being dyed with alder; and the upper with the hair outwards. For the upper garment they chooſe black, white, or ſpeckled ſkins, the hair of which is moſt eſteemed for the beauty of its colours.

Men and women, without diſtinction, uſe the above-mentioned garments, their dreſs only differing in their under cloathing, and in the

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. Gmel. flor. Sib.

† Juniperus.

‖ Chamemorus Rai Syn.

‡ Vaccinium Spec. 2. Linn. Bilberry.

** Vaccinium Bilberry Spec. 3. Linn.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lillium flore atro rubente.

use for cloaths, such as deer-skins, seals, dogs, and beavers, they prepare one way: in the first place, wetting and spreading it out, they scrape off all the pieces of fat or veins that remained after fleaing it, with stones fixed in pieces of wood; then rubbing it over with fresh or sour caviar, they roll it up and tread it with their feet 'till the hide begins to stink; they again scrape and clean it, and continue this 'till the skin is soft and clean. Such skins as they want to prepare without the hair they use at first in the same manner as above; then hang them in the smoke for a week, and afterwards soak them in warm water to make the hair fall off; at last rubbing them with caviar, by frequent treading and scraping them with stones, they make them clean and soft. 281

They dye the deer and dog skins, which they use for cloathing, with alder bark cut and rubbed very small; but the seal-skins, which they use either for cloathing, shoes, or straps for binding their sledges, they dye in a particular manner: having first cleaned off the hair they make a bag of the skin, and turning the hair side outward they pour into it a strong decoction of alder bark; after it has lain thus sometime, they hang it upon a tree, and beat it with a stick. This operation they repeat 'till the colour is gone quite through the skin; then they rip it open, and stretching it out, dry it in the air; at last they rub it 'till it becomes soft and fit for use. Such skins are not unlike dressed goat-skins: however, *Steller* says that the *Lamuskki* have yet a better way of preparing them. These skins they call *mandari*, and they are worth three shillings a-piece. The hair of the seals, with which they ornament their cloaths and shoes, is dyed with the juice of the red wortleberry boiled with alder bark, alum, and lac lunæ; which makes a very bright colour. They used to sew their cloaths and shoes with needles made of bone, and instead of thread they made use of the fibres of the deer, which they split to the size or thickness required. 281 386 294 412 283

They

2: Schrenck--634 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu A86
Kamchadal RY3

A 304 175 [113]

/419 cont./

3. (cont.)
slovar' /Ainu-Russian Dictionary/, supplement to Uchen. Zap. Imp. Kazansk. Univ. 1875g., p. 33.

A 304 184

Rinsô (1808) (4) already noticed that the women there /420/ tattoo

4. "To-tats ki ko" (Siebold, Nippon, VII, p. 182).

themselves more feebly than those from Jesso and that in general this custom becomes less frequent there as one goes farther inland, that is, farther north from Aniwa. Finally, the same custom prevails among the Ainu of the Kurile Islands, and, indeed, according to Krascheninnikof (1), it extends to both sexes

A [113]

1. Krasheninnikov", "Opisanie zemli Kamchatki" (Polnoe sobranie putesh. po Rossii, Vol. II, St. Petersburg, 1819, p. 258).

there, but the men content themselves with blackening the middle of the lips, while the women tattoo themselves all around the mouth and also on the hands and arms almost up to the elbows.

K 302 [304]

It is very noteworthy that the ancient Italmen on Kamchatka, though surrounded by tribes among whom tattooing was a matter of course, did not themselves adhere to this habit, or bad habit, but only painted themselves white and red, which, before the arrival of the Russians, they practiced very heavily, "like monkeys," according to Steller, but later "much more moderately, in the fashion of the Cossack women" (2).

K [113] [386]

2. Steller, Beschreib. von dem Lande Kamschatka, p. 300. Krascheninnikof, op. cit., p. 68. To paint with white, the Italmen used either decayed wood or a naturally calcined mica which occurs here and there

K 302 [386] /420 cont./

2. (cont.)
in Kamchatka, but for painting with red, a seatang pulverized with fish oil or seal oil.

KK 304 Among the peoples living farther to the north and east, on the other hand, tattooing is again a locally customary practice? Among the Koryak, to be sure, it is limited to only the women and is not general even among them, where it begins with the wedding and new designs are added every year, so that, according to Ditmar's testimony, some old women look mottled all over as a consequence of the tattooing (3). The custom of

KK [113]

3. Ditmar, "Ueber die Korjäken und die ihnen sehr nahe verwandten Tschuktschen /On the Koryak and the Very Closely Related Chukchee/" (Bull. de la classe hist. philol. de l'Acad. Impér. des sc. de St. Pétersb., Vol. XIII, p. 102; Mél. russes, Vol. III, p. 5).

C 304 The custom of tattooing is more generally widespread among the Chukchee, for among them it also extends to the girls from their ninth or tenth year on and even to some of the men. The latter, however, as a rule content themselves with only one or two short horizontal strokes above the root of the nose, a cross on each jaw, or the like, whereas the women tattoo more or less the entire face and the arms from the shoulder down to the wrist. C [171] According to Nordqvist (4), who has discussed this subject

C [113]

4. "Bidrag till kännedomen om Tschuktscherna /Contribution to Knowledge about the Chukchee/" (Ymer, 1882, p. 38).

in detail and has published a few patterns of Chukchee tattooing, they correspond in the basic features to those that Dr. Stuxberg

137 Amongſt the medicinal plants we muſt mention the fol-
278 lowing: 1ſt, Kailoun, a plant which grows in all the ſwamps near the rivers. The inhabitants uſe this as a cataplaſm in all boils to make them ſuppurate; and taken in decoctions, they imagine it produces ſweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtſchatka*, they uſe in decoctions for all pains and ſwellings of the legs. 3dly, Katunatch †, or wild roſemary, is not ſo ſtrong as in other parts. The inhabitants have thought it beneficial in the venereal diſeaſe, but in this are deceived. 4thly, The ſea oak ‖ is thrown out by the waves; and being boiled with the ſweet herb, a decoction of it is given in fluxes. 5thly, The ſea raſberry is given to women in labour, to promote the birth. 6thly, There is yet another ſea plant, called yachanga ‡, which the ſea throws out near to the *Kurilſkaya Lopatka*, reſembling the whale's beard. This the inhabitants uſe in cholic pains, infuſing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almoſt all the ſhore of
757 *Kamtſchatka*. This plant is made uſe of againſt pains in the back in the following manner:---They put the patient into a hut made exceedingly warm; and when he begins to ſweat profuſely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occaſion ſudden death: however from this practice they
137 generally obtain great relief. 8thly, The zgate †† muſt not
278 be omitted, whoſe dreadful qualities are but too well known
411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is ſqueezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venoſis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and
R. the other in the year 1713 upon the river *Awatſcha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

When

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 hunt this animal. There are various modes of attacking it; ſometimes they lay ſnares for it: under a heavy trap, ſupported in the air by a ſcaffolding ſufficiently high, they place ſome kind of bait to attract the bear, and which he no ſooner ſmells and perceives, than he eagerly advances to devour; at the ſame time he ſhakes the feeble ſupport of the trap, which falls upon his neck, and puniſhes his voracioufneſs by cruſhing his head, and frequently his whole body. In paſſing the woods I have ſeen them caught in this way; the trap is kept baited till it ſucceeds, which ſometimes does not happen for almoſt a year. This method of taking them requires no great boldneſs, or fatigue; but there is another mode, very much adopted in this country, to which equal ſtrength and cou-
224 rage are neceſſary. A Kamtſchadale goes
411 out, either alone or in company, to find a bear. He has no other arms than his gun,

a kind

7:Lesseps T-3 (1787-88)1790 Kamchadal

224
411

a kind of carabine whose but-end is very small; a lance or spear; and his knife. His stock of provision is made up in a bundle containing about twenty fish. Thus lightly equipped, he penetrates into the thickest part of the woods, and every place that is likely to be the haunt of this annimal. It is commonly in the briars, or among the rushes on the borders of lakes and rivers, that the Kamtschadale posts himself, and waits the approach of his adversary with patience and intrepidity; if it be necessary, he will remain thus in ambuscade for a whole week together, till the bear makes his appearance. The moment it comes within his reach, he fixes in the ground a forked stick* belonging to his gun, by means of which he takes a truer aim, and shoots with

* The Kamtschadales are unable to shoot without this means of resting their gun, which, from the time required to prepare it, is evidently inconsistent with the celerity of this instrument, its chief advantage to a sportsman.

more

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 more certainty. It is ſeldom that, with
411 the ſmalleſt ball, he does not ſtrike the bear either in the head, or near the ſhoulder, which is the tendereſt part. But he is obliged to charge again inſtantly, becauſe the bear, if the firſt ſhot has not diſabled him, runs* at the hunter, who has not always time for a ſecond ſhot. He has then recourſe to his lance, with which he quickly arms himſelf to contend with the beaſt, who
224 attacks him in his turn. His life is in dan-
825 ger† if he does not give the bear a mortal thruſt; and in ſuch combats, it may be ſup-

* It is common enough alſo for it to take to flight, notwithſtanding its wound, and conceal itſelf in thickets or ruſhes, where it is traced by means of its blood, and found either dead or expiring.

† I was aſſured that when a bear triumphs over his aggreſſor, he tears the ſkin from the ſkull, draws it over his face, and then leaves him; a mode of revenge which implies, according to the Kamtſchadales, that this animal cannot bear the human aſpect; and this ſtrange prejudice ſupports them in the opinion of their ſuperiority, and ſeems to inſpire them with additional courage.

poſed

22: Guillemard T-2 (1882) 1886 Kamchadal

501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

CHAP. V.

415 325 *Of their* HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 501 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into a

442 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
445 they are ingenious enough to make ſpears and arrows out of the iron pots and kettles which they buy; and they are ſo dextrous
R. 177 when the eye of a needle breaks as to make a new eye, which
441 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

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177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

use for cloaths, such as deer-skins, seals, dogs, and beavers, they prepare one way: in the first place, wetting and spreading it out, they scrape off all the pieces of fat or veins that remained after flaing it, with stones fixed in pieces of wood; then rubbing it over with fresh or sour caviar, they roll it up and tread it with their feet 'till the hide begins to stink; they again scrape and clean it, and continue this 'till the skin is soft and clean. Such skins as they want to prepare without the hair they use at first in the same manner as above; then hang them in the smoke for a week, and afterwards soak them in warm water to make the hair fall off; at last rubbing them with caviar, by frequent treading and scraping them with stones, they make them clean and soft. 281

They dye the deer and dog skins, which they use for cloathing, with alder bark cut and rubbed very small; but the seal-skins, which they use either for cloathing, shoes, or straps for binding their sledges, they dye in a particular manner: having first cleaned off the hair they make a bag of the skin, and turning the hair side outward they pour into it a strong decoction of alder bark; after it has lain thus sometime, they hang it upon a tree, and beat it with a stick. This operation they repeat 'till the colour is gone quite through the skin; then they rip it open, and stretching it out, dry it in the air; at last they rub it 'till it becomes soft and fit for use. Such skins are not unlike dressed goat-skins: however, *Steller* says that the *Lamuskki* have yet a better way of preparing them. These skins they call *mandari*, and they are worth three shillings a-piece. The hair of the seals, with which they ornament their cloaths and shoes, is dyed with the juice of the red wortleberry boiled with alder bark, alum, and lac lunæ; which makes a very bright colour. They used to sew their cloaths and shoes with needles made of bone, and instead of thread they made use of the fibres of the deer, which they split to the size or thickness required. 281 386 294 412 283

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CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

114 At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times. 252 Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones, 323 and there is nowhere in the writings of these authors a reference to clay vessels. 415 Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Palæ-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.

[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I–II, 1819, St. Petersburg (in Russian).

[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1867, p. 139.

[4] See R. Torii, *Étude Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Kluchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851–1855*, p. 326, St. Petersburg, 1890, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thaleichys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1924, p. 12, in Russian).

000 that they had been lamps, and not cooking pots; but this opinion may be offset by the shape, size and, especially, the depth of the pots found.[1]

323 Witsen, based on information received from cossacks, stated that the Kamchadal used clay vessels.[2] The Cossack Atlassov,[3] mentioned above, says in his
415 report to the Government that the Kamchadal made pottery in his time.[4]

We see that before our excavations there were some indications as to the former pottery-making of the Kamchadal, but these were somewhat vague. Our diggings furnished more definite data concerning the Kamchadal types and methods of manufacturing pottery. We discovered two kinds of coarse clay vessels—with handles inside and with holes near the upper rim of the pots—and a kind of more elaborate ceramics with outer ornamental designs.

POTS OR PANS WITH EARS INSIDE

323 Fragments of pottery with handles inside were found by the writer in many
172 diggings of the central and southern parts of Kamchatka, and he was fortunate to discover one complete pot in a pit on the shores of the Nalacheva Lake and another on the Nalacheva Cape (see Plate 17, figs. 1, 3). We may say that not only the wheel was unknown to the Kamchadal manufacturer of this rude kind of pottery, but neither the coil method nor the basket modeling process was applied by him, though there remained some impressions of basketry on the outer side. It seems that the vessels were worked out from single blocks of clay and beaten into shape. It is the crudest pottery. The dimensions of figure 1 have been given before (see p. 48). The thickness is about a third of an inch. It is difficult to say whether this kind of pottery was especially burnt before being used or was baked by the fire while cooking. The fact that these vessels remained intact after having been long buried under the ground proves that they were solidly made and water-tight. Being smeared with fat and blackened by smoke, they received a coating against water, which may be compared with the glaze of higher types of pottery. To make the clay more resistent it was tempered with sand, gravel and the hair of sables' tails.[5] The Cossack Atlassov, when presenting to the Government the tribute of the Kamchadal in sable-skins, delivered many of them without tails. In apologizing he said that the Kamchadal make boas of sables' tails and used the hair for tempering clay.

415 There is no doubt that the inside ears were intended for suspending the pot
172 over the fire, as they afforded better protection to the suspending cord or thong than those outside the pan.

[1] Carl von Dittmar, *Reisen und Aufenthalt in Kamchatka in den Jahren 1851–1853*, St. Petersburg, Part I, p. 212.

Dittmar gives the following measurements of a pot: upper diameter, 12 cm.; lower diameter, 10 cm.; maximum width, 14 cm.; depth, 10 cm. This vessel, therefore, had an aperture smaller in diameter than the middle part, and its bottom was still smaller than the aperture. Clay lamps are of a quite different shape, as shown by Bogoras, Nelson and other explorers of the northern regions.

[2] Nicolaas Witsen, *Noord en Oost Tartarye*, Amsterdam, vols. I–II, 2d ed., 1705, p. 673 (1st ed., 1692).

[3] See before p. 1.

[4] See G. Spansky, *Vladimir Atlassov the Conqueror of Kamchatka*, Jour. Imperial Russian Geographical Society, 1836, vol. XXIV, p. 164 (in Russian).

[5] Munro (*Prehistoric Japan*, p. 196) supposes that grass was mixed by the Kurilians in their primitive pottery, the clay of which became black, due to the carbonisation of the grass. R. Torii (*Les Ainos des Iles Kouriles*, p. 186), referring to information received from old Kurilian people, says that the ancient Kurilian Ainos tempered clay for pottery with sand and minced grass called "nokkanki."

1. [The end of the 17th Century -- Analysis]

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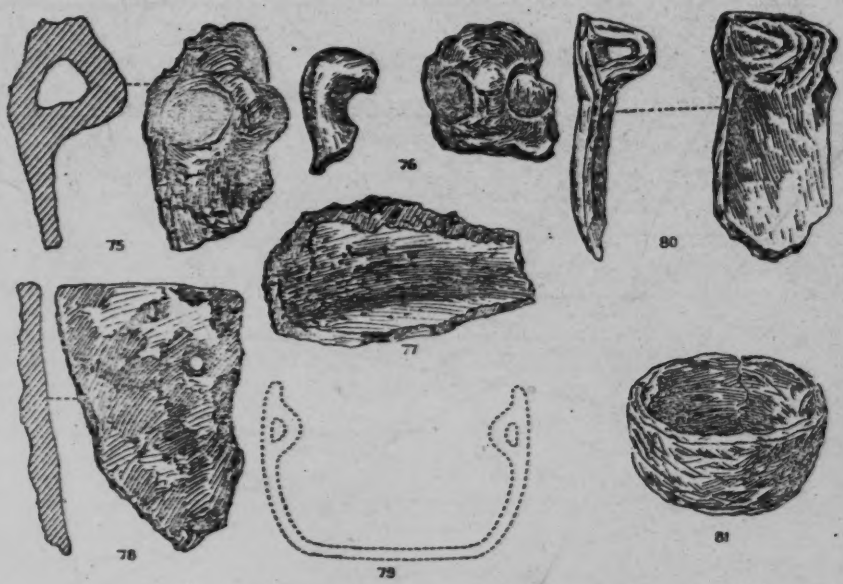
We have referred to Mr. Torii who found that the Kurilian Ainos used this kind of pottery. Mr. Mamiya Rinzo displayed a clay pan with handles inside from Yezo.[1] Mr. S. Susuki has also shown a clay pan of rough make with the handles inside from Sakhalin Island.

The question arises as to where we may look for the place of origin of this kind of pottery: in Kamchatka or Japan. Pottery in general needs a sedentary life for its proper development. The same may be said of the primitive pottery



Fragments of ancient Kurilian pottery.

in question. It could develop among the original settlers of Japan, the Ainos, and spread to the north, to Sakhalin, Kurilian Islands and Kamchatka. The sedentary or semi-sedentary fishers of Kamchatka might have adopted it from the Kurilians.

According to Mr. N. Tanaka, "within the last 20 years earthenware pans with handles inside were in use in Musashi and the island of Hachijo."[2]

Illustrations of the following fragments of ancient Kurilian pottery are taken from R. Torii's work (*Les Ainou des Iles Kouriles*, Plate XXXIII). Figures 75 and 76 show fragments of Kurilian pottery with inside ears. Figure 77 shows a

[1] The Japanese investigator Mamiya Rinzo spent the years 1804–1817 in Sakhalin.
[2] See Munro, *Prehistoric Japan*, Yokohama, 1911, p. 196. Cited from Tokyo Jinruigaku (Tokyo Anthropological Magazine), No. 16, 1887.

171 fragment of the lower part and the flat bottom of a clay vessel. Figure 78 represents a fragment of a clay vessel with a drilled hole for tying it by a cord to the hole
415 of another broken piece of the vessel. In figure 79, Torii gives an outline of a clay pan with two ears inside. It is not clear whether there was a third ear, like that
172 in the Kamchadal clay pots.

Figure 80 shows a fragment of ancient Aino pottery with an ear inside, found, according to Torii, in Sapporo on Yezo. It is shown one-third natural size. Figure 81 represents a clay vessel of ancient pottery with ears inside found in Esashi, Yezo; two-ninths natural size. This drawing is taken from an article by the late Professor S. Tsuboi in the Bulletin of the Tokyo Anthropological Society (vol. IV, No. 37, March 1889, p. 227). This vessel has only two inside ears. A rough sketch of a Sakhalin clay pot with ears inside is shown by Mr. Suzuki in his work, *Karafuto Nikki*.[1] Like figure 81 this vessel also has only two ears.

82 83

Iron cooking vessels.

According to Torii (*Les Ainou des Iles Kouriles*, p. 279) fragments of pottery with ears inside the pots were found also in Japan, i. e., on the Nippon Island. Thus we see that the manufacture of this kind of primitive pottery was not limited to the Kurilian Islands and Sakhalin only. It spread all over Japan—over localities formerly inhabited by Ainos. But from nowhere, except in Kamchatka, were clay vessels with three inside handles reported.

Figure 82 shows a sketch of an iron pan from Sakhalin with ears inside the vessel. The illustration was published by Torii (*Les Ainou des Iles Kouriles*, p. 195). Figure 83 shows a drawing of an iron pot with loops on the inside surface. It is from a photograph of a piece in the Museum of the Imperial University in Tokyo, kindly forwarded to me by Professor Akira Matsumura. The cord is covered with birch bark in order to protect it from the heat of the boiling pot. It must be noted that the iron pots (figs. 82–83) have only two inside ears like the

[1] Suzuki traveled in Karafuto (Sakhalin) Island in 1853. See *Karafuto Nikki*, Shigehisa Suzuki, With Notes and Addenda by Takeshiro Matsuura, 2 vols., Tokyo, 1860.

171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] 415 The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments 172 of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 Fragments of a different kind of clay pots were found by the author in the 323 excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these 171 fragments seems to be from small vessels, the clay to be burnt, and the pots more 172 decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot had a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 62 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Tsubai, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rims.

[4] See the author's work, *The Koryak*, p. 645, fig. 165.

171 common with that of the thick and clumsy clay lamps and unbaked quadrangular
415 kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in
323 the Koryak excavations were black from soot and fat, and were evidently well
baked, as they remained strong and hard, although they had been lying in the wet
172 soil. All these potsherds were made of coarse clay containing fine gravel and pieces of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen below (p. 20) that neolithic sites in the Baikal Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the author in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Ainos is shown in figure 77.

[P. 105]

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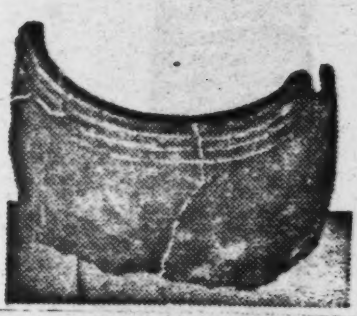

1. Clay pot with ears inside; discovered by the author in a pit of an old Kamchadal dwelling on the shore of Nalachevo Lake. The pot was split in two places, but complete, and later cemented by the author. The splitting may be regarded as a result of freezing and thawing of the soil. It was discovered at the depth of 3 feet 4 inches. Digging was done with great care. When a piece of the rim appeared, the spade was discarded and the earth from and around the pot was taken out by the hands. For the dimensions of the pot see p. 4b.
2. Similar clay pot of smaller size, discovered in a pit on the Nalachevo Cape.
3. Portion of upper part of a clay pot without handles inside. It consists of three fragments cemented together by the author. No other pieces of the same pot were discovered and we do not know whether its bottom was flat or rounded. Outer parallel lines made by a comb-like implement are similar to inner parallel lines of pots with handles inside.

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

G /449 cont./ Mamia Rinsô (4),
323 to be sure, reports about the Ainu of southern Sakhalin that they
171 make earthenware vessels, and, to be sure, of two kinds, the
A one of about six to seven inches in diameter with ears on two
323 sides, tojes'ju, i.e., earthen pans, the other called kamui'sju,
[177] i.e., divine pans, but one cannot fail to recognize the recent
A Japanese origin of this art. In the seventeenth century, when
[175] Vries and his companions discovered Jesso and the nearby Kurile
[172] Islands, they saw the inhabitants of them eating from lacquered
[415] wooden bowls /450/ and quadrangular troughs (1), and just such

A [113]

1. Siebold, Aardr. en volkenkund. toelicht. tot de ontdekk. van Vries /Geographical and Ethnographical Explanations from the Discoveries by Vries/, P. 108.

bowls, but no earthenware vessels, are among the articles that Poljakof found, besides skulls and bones, in old Ainu graves on
G Sakhalin and presented to our museum. Concerning the ancient
321 Kamchadal, one finds, to be sure, in the report of the Cossack
171 Atlassof published by Witsen (2), the information that they
K
323
●415
[113]

2. Noord en Oost Tartarye, ed. of 1705, p. 673.

manufacture for their own use earthenware and wooden vessels, but the former are more than questionable. Steller and
K Krascheninnikof saw only wooden vessels among them, and
[172] Ditmar (3), while digging on the sites where their yurts had once

K [113]

3. "Reisen und Aufenthalt in Kamschatka in den Jahren 1851-1855 /Travels and Residence in Kamchatka in 1851-1855/" (Beitr. zur Kenntn. des Russ. Reiches, third series, Vol. VII, p. 246).

stood, only once found, among numerous stone tools, a small piece of earthenware, which crumbled in his hands because it had not been fired, or at most only slightly, and which he thought was a train-oil lamp shaped by hand.

4. Op. Cit., p. 184.

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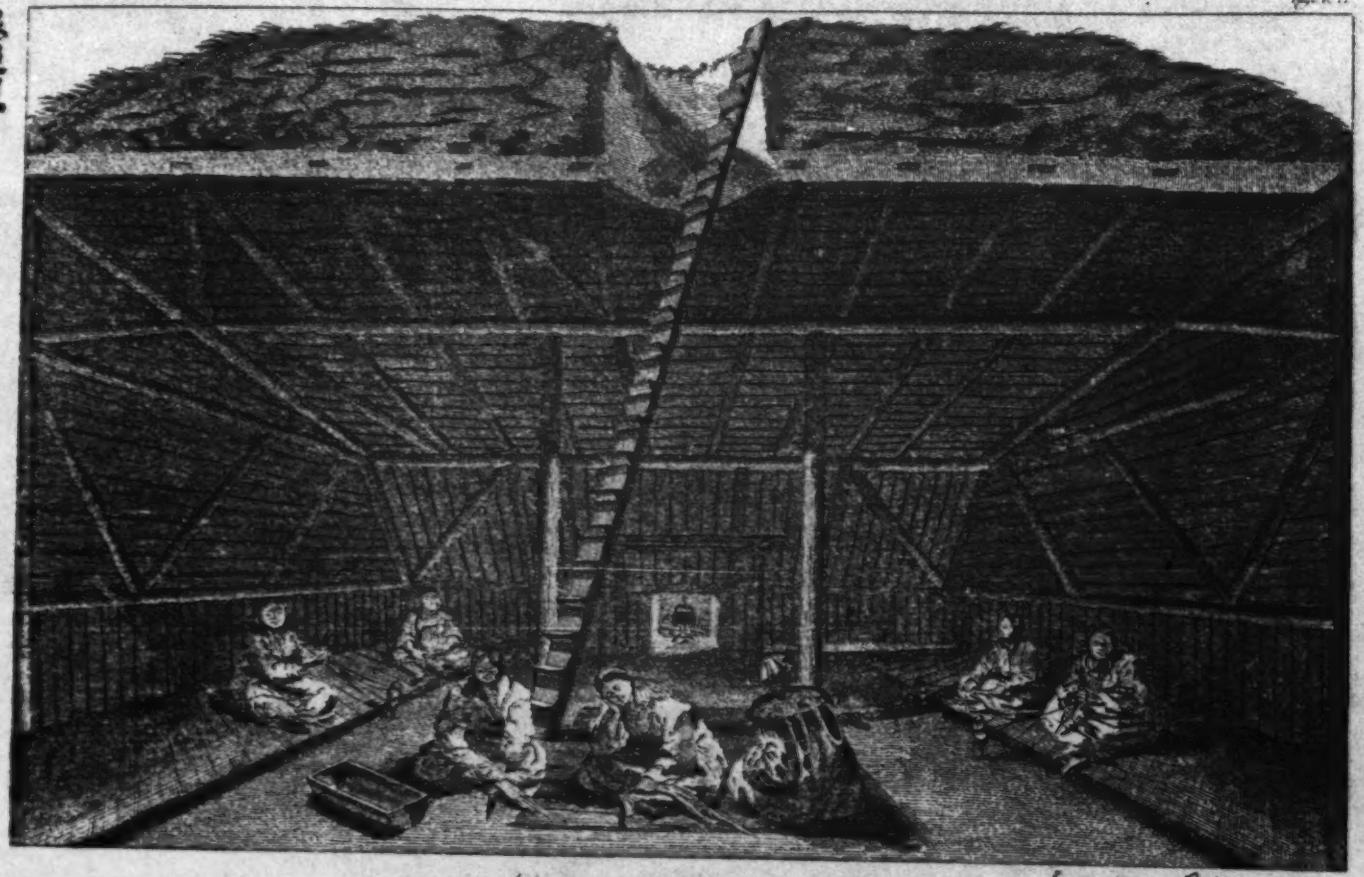

The Inside of a Winter Hut

facing R 181

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtſchadales. 961

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-place is in one of the long ſides of the ſquare: between the pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs. 342 352

They enter their huts by ladders commonly placed near the fire hearth, ſo that when they are heating their huts the ſteps of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 342 417 626

to

Summer Huts.

I. Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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facing p. 182

to ſuffocate any one who is not inured to bear it: but the natives find no difficulty in going out or in; and though they can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

They have ſuch balagans, not only round their winter habitations, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpecially in the harveſt when the fiſh and berries begin to grow ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

7:Lesseps T-3 (1787-88)1790 Kamchadal

342 of thatch, or dried grafs, placed upon long
354 poles faftened together at the top, and bear-
511 ing upon the rafters. This is at once the
417 firft and laft ftory; it forms the whole apartment, or rather chamber: an opening in the roof ferves inftead of a chimney to let out the fmoke, when a fire is lighted to drefs their victuals; this cookery is performed in the middle of the room, where they eat and fleep pell-mell together without the leaft difguft or fcruple. In thefe apartments, windows are out of the queftion; there is merely a door, fo low and narrow, that it will fcarcely fuffice to admit the light. The ftair-cafe is worthy of the reft of the building; it confifts of a beam, or rather a tree jagged in a flovenly manner, one end of which refts on the ground, and the other is raifed to the height of the floor. It is placed at the angle of the door, upon a level, with a kind of open gallery that is erected before it. This tree

retains

417/576 retains its roundneſs, and preſents on one ſide ſomething like ſteps, but they are ſo incommodious that I was more than once in danger of breaking my neck. In reality, whenever this vile ladder turns under the feet of thoſe who are not accuſtomed to it, it is impoſſible to preſerve an equilibrium; a fall muſt be the conſequence, more or leſs dangerous, in proportion to the height. When they wiſh perſons to be informed that there is nobody at home, they merely turn the ſtair-caſe, with the ſteps inward.

251 Motives of convenience may have ſuggeſted to theſe people the idea of building ſuch ſtrange dwellings, which their mode of living renders neceſſary and commodious. Their principal food being dried fiſh, which is alſo the nouriſhment of their dogs, it is neceſſary, in order to dry their fiſh, and other proviſions, that they ſhould have

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the 342 interior (7). Apart from minor details in its interior arrangement

354 [191]

[113]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its [419] outer end. According to Steller (1), only children were permitted

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachttschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

342 [354] [417] [101]

/334 cont./

hole directly above the hearth, from which an oblique beam with deep notches led down to the floor of the yurt, served the adults for entering and leaving. As Steller reports (3), on account of

3. Op. cit., pp. 8 and 240.

their earth yurts, the Kamchadal of the Penshini (Okhotsk) Sea were called "Namalau" or "Namalan," i.e., living in subterranean houses, by their northern neighbors, the Reindeer Koryak -- a designation from which Gerland derives the name Namollo for the Eskimo or Juit /Yuit/ -- as they call themselves -- who migrated back from America to the Asiatic coast of the Bering Sea (4).

114 10 [113]

4. G. Gerland, "Zur Ethnogr. des äussersten Nordostens von Asien /On the Ethnography of the Extreme Northeastern Part of Asia/" (Zeitschr. der Gesell. für Erdkunde zu Berlin, Vol. XVIII, 1883, p. 221). I am not able to decide whether this derivation is justified, but in any case Gerland has completely misunderstood the above statement by Steller, in that he thinks that the Koryak designate with the first of these names (Namalau) the Kamchadal living along the Kamchatka River, and with the latter (Namalan) the Tungus, likewise because of their earth yurts. According to Steller, these names refer neither to the one nor to the other, but both alike to the Kamchadal (Italmen) along the Sea of Okhotsk (Penshini /Penzhina/). He expressly states about those living along the Kamchatka River that the Koryak call them Jutilitan, but is unable to give any reason for it (p. 8); concerning the Tungus, however -- who, by the way, have no earth yurts at all -- he notes only (p. 240) that they, in spite of their frequent raids extending to the Penshina River even before the arrival of the Russians,

343 their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which
361 are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

228 They look upon that river near which their village is situated,
621 as the inheritance of their tribe; and if one or two families at
403 any time desire to live separate from their native village, they
614 build themselves huts upon the same river, or some branch that falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kuriljkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of

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their

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
783 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

6:Antropova E-4 (no date) 19-4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other
[614] diseases which devastated entire districts. The remnants of the various
[178] clans could no longer exist independently and united into larger territorial units. Thus, instead of the former clan villages, new settlements sprang
[728] up, inhabited by members of various clans. New villages were also created by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

361

View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7:Lesseps T-3 (1787-88)1790 Kamchadal

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merce, and their decisions are either confirmed or annulled by the court to which they are carried by appeal. The Russian code of laws is the only one that is attended to; it is too well known to require that I should enter into particulars; and I could only repeat what has been already related by various historians and travellers better informed upon the subject than myself.

I ought however to add, that the property of the Kamtschadales devolves, of course, upon their decease, to the next heir, or to whomsoever it is bequeathed. The will of the testator is equally respected, and as literally adhered to, as it could be with those nations of Europe who are most scrupulous on the subject of successions.

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Divorces are neither practised or allowed among the Kamtschadales. The Russians seem to court their alliance, though it procures

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY

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WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.
576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

or whatever is agreeable to his landlord; in return for which he receives old rags, and uſeleſs lame curs. This, however, is reckoned no injury, but a proof of friendſhip; and he expects, in turn, to uſe his friend in the ſame manner. And if that man, who has thus plundered his friend, returns not his viſit in proper time, he does not thereby ſave his preſents, for the gueſt pays him a ſecond viſit, at which time he is obliged to make him what preſents he is able; but if, either out of poverty or avarice, he makes him none, it is looked upon as the greateſt affront, and he muſt expect this man always to be his enemy: beſides, it is ſo diſhonourable that no body elſe will ever live in friendſhip with him afterwards.

In their banquets they treat their friends in the ſame manner, only they do not torment them with heat, nor expect any preſents. When they entertain with the fat of ſeals or whales, they cut it out into ſlices; and the landlord kneeling before his company, with one of theſe ſlices in one hand and a knife in the other, thruſts the fat into their mouths, crying in a ſurly tone, *Ta na*, and with his knife he cuts off all that hangs out of their mouths, after they are crammed as full as they can hold. Whoever wants any thing from another may generally obtain it upon theſe occaſions; for it is reckoned diſhonourable for the gueſt to refuſe his generous landlord any thing. An inſtance of this happened, between a *Kamtſchadale* and a newly chriſtened Coſſack, juſt before I arrived, and was then the common ſubject of converſation. The Coſſack, according to the cuſtom of that country, had a *Kamtſchadale* to his friend, who he heard was poſſeſſed of a very fine fox-ſkin, which he greatly deſired, but which the *Kamtſchadale* would by no means part with. The Coſſack invited him to his hut, where he entertained him with vaſt plenty of victuals, and by throwing water upon burning-hot ſtones made the heat of the hut intolerable to his friend the *Kamtſchadale*, 'till at laſt he was obliged to beg for mercy.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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This the Coſſack would not grant 'till he had obtained a promiſe of the fine fox-ſkin. It ſhould ſeem, that this entertainment could not be agreeable to the *Kamtſchadale*: however, he ſeemed to be pleaſed with it, and to ſwear that he never thought it poſſible to make ſuch a heat, or that the Coſſacks could entertain their friends with ſo much reſpect; and declared, that though he looked upon his fox-ſkin as an ineſtimable rarity, yet he parted from it with pleaſure on that occaſion, and ſhould always remember the noble entertainment of his friend.

CHAP. XVI.

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Of their COURTSHIP, MARRIAGES, *&c.*

WHEN a *Kamtſchadale* reſolves to marry, he looks about for a bride in ſome of the neighbouring villages, ſeldom in his own; and when he finds one to his mind, he diſcovers his inclination to the parents, deſiring that he may have the liberty of ſerving them for ſome time: this permiſſion he eaſily obtains, and, during his ſervice, he ſhews an uncommon zeal in order to ſatisfy them of what he can do. After having thus ſerved, he deſires liberty to ſeize his bride; and if he has happened to pleaſe the parents, his bride, and her relations, this is preſently granted; but, if they diſapprove of it, they give him ſome ſmall reward for his ſervices, and he departs. It ſometimes happens that theſe bridegrooms, without diſcovering any thing of their intention, engage themſelves in ſervice in ſome ſtrange village; and though every one ſuſpects their deſign, yet no notice is taken of it, 'till either he or his friend declares it.

When

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 *March*, when it is washed away again by the high water arising
226 from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other forts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make less use of them than of roots and fishes:
433 the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

6:Antropova E-4 (no date) 1964 · RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

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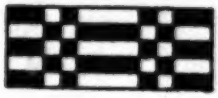
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type--spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



7:Lesseps T-3 (1787-88)1790 Kamchadal

224 himſelf, and with his claws and teeth laid hold of the noſe of one of the dogs, who had no reaſon to be pleaſed with his reception. As we were deſirous of taking the animal alive, we kept back the dogs; the ſable quitted immediately his hold, and ran up a tree, where, for the third time, the nooſe, which had been tied anew, was preſented to him; it was not till the fourth attempt that the Kamtſchadale ſucceeded *. I could not have imagined that an animal, who has ſo much the appearance of cunning, would have permitted himſelf to be caught in ſo ſtupid a manner, and would himſelf have placed his head in the ſnare
224 that was held up to him. This eaſy mode
433/651 of catching ſables, is a conſiderable reſource to the Kamtſchadales, who are obliged to

* M. Kaſloff, who preſided in this chace, had the politeneſs to make me a preſent of this ſable, called in this country *ſobol*, and promiſed to add it to another, that I might bring a couple with me to France.

to

29:Cochrane T-2 (1821-22)1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

[see page 74--Analyst]

other places, and the ſecond by boiling ſea water into ſalt; but the troubleſome diſtant carriage of the iron, and the boiling of the ſalt, are attended with ſuch expence and difficulty, that they are both ſold at a moſt intolerable price. One cannot buy a common ax under two rubles, and a pound of ſalt coſts four rubles. 135 258 435 439

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS. 133

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *.

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſhin, which contains 27 inches.

137 rows upon the ſtalk; the lower row having three leaves, and the upper four, placed croſsways: the form of the leaves is oval. Sometimes above the ſecond row one leaf grows juſt under the flower. Upon the uppermoſt part of the ſtalk grows one dark cherry-coloured flower, rarely two, ſomething leſs than that of the common lilly; and this is divided into ſix equal parts. The pointal in the center of the flower is triangular, at the top flat, and in three different cells contains flat reddiſh ſeeds. Round the pointal are ſix white ſtamina with yellow heads. Its root, which is properly the ſaranne, is about the bigneſs of a root of garlick, made up of many little cloves, whence it acquires a round form. It bloſſoms in *June*, at which time one can ſee no other flower over the whole fields.

222 The natives of *Kamtſchatka*, and the wives of the *Ruſſian*
252 Coſſacks, dig up the roots in the harveſt, or take them out
262 of the neſts of the field-n[illegible]y† them in the ſun, and
435 ſell them for five or ſix rubles the pood. The ſaranne half boiled, and beat up with brambleberries, cranberries, or ſuch other of this kind, makes one of the moſt agreeable confections, being of a ſharp ſweetneſs; and if one had enough for every day's uſe, the want of bread would be tolerably
137 well ſupplied. Mr. *Steller* reckons five ſpecies of this plant: 1ſt. the kimtchiga, which grows near *Tegbil* and *Harioufkovoy*, in appearance like a large ſugar-pea, and if boiled taſtes much the ſame; but neither he nor I ever ſaw this plant in bloſſom: 2dly, the round ſaranne, which I have deſcribed above: 3dly, ovſenka *, which grows every where in *Siberia*, being roots of red lillies, whoſe flowers are all turned up in curls; the bulb is compoſed of an infinite number of ſmall cloves: 4thly, titichpa,

* Lilium radice tunicata, foliis ſparſis, floribus reflexis, corollis revolutis. GMEL. flor. Sib.

† Defect in Original. Sentence probably reads: "field-mice to dry?"

which

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks 1his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. GMEL.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. LINN.

1 [Original torn. Probably "it worth"

302 they came to be Christians they were with difficulty prevailed upon to quit this dress for one more decent: however, at present round the *Russ* settlements all is intirely changed, the women wearing shirts, ruffles, waistcoats, caps and ribbands; which change nobody now complains of, except the very old people. The women do all their work in mittins: they formerly never washed their faces, but now they use both white and red paint; for white paint they make use of a rotten wood, and for red a sea plant *, which they boil in seals' fat, and rubbing their cheeks with it make them very red. They dress most in the winter time, especially when they either receive or pay visits.

435 The common cloaths for a *Kamtschadale* and his family will not cost him less than an hundred rubles, for the coarsest worsted stockings, which cost in *Russia* 20 kopeeks, cannot be bought here for less than a ruble; and all other things are sold in the same proportion. The *Kuriles* are more able to buy good cloaths than the *Kamtschadales*, for they can purchase for one sea beaver as much as the *Kamtschadales* can for twenty foxes, and one beaver costs the *Kuriles* no more trouble than five foxes do the *Kamtschadales*; for he must be a good hunter who catches more than ten foxes in the winter, and a *Kurili* thinks himself unlucky if he doth not catch three beavers in the season; besides which great numbers are thrown upon the shore by storms,

* Fucus marinus abietis forma. Pinus maritima, seu fucus teres. Dodd. Append. 326. Ray Linn.

CHAP.

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon fliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodovſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 491 484

'till

7:Lesseps T-3 (1787-88)1790 Kamchadal

273 437 in like manner, all the profits of their knavery.

273 435 439 I ſhall terminate the article of commerce by adding, that the perſons who deal moſt in wholeſale, are merely agents of the merchants of Totma, Vologda, Grand Uſtiug, and different towns of Siberia, or the factors of other opulent traders, who extend even to this diſtant country their commercial ſpeculations.

All the wares and proviſions, which neceſſity obliges them to purchaſe from the magazines, are ſold exceſſively dear, and at about ten times the current price at Moſcow. A *vedro** of French brandy coſts eighty roubles†. The merchants are al-

* A Ruſſian meaſure containing from fifteen to twenty quarts.

† Eighteen pounds ſterling, eſtimating the rouble at four ſhillings and ſixpence.

lowed

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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lowed to traffic in this article; but the brandy, diſtilled from corn, which is brought from Okotſk, and that produced by the country, which is diſtilled from the *ſlatkaia-trava*, or ſweet herb, are ſold, upon government account, at forty one roubles ninety-ſix kopecks* the vedro. They can be ſold only in the *kabacs*, or public houſes, opened for that purpoſe. At Okotſk, the price of brandy diſtilled from corn is no more than eighteen roubles the vedro; ſo that the expence of freight is charged at twenty-three roubles ninety-ſix kopecks, which appears exorbitant, and enables us to form ſome judgment of the accruing profit.

The reſt of the merchandize conſiſts of nankins and other China ſtuffs, together with various commodities of Ruſſian and foreign manufacture, as ribands, handker-

* Nine pounds nine ſhillings.

22: Guillemard T-2 (1882) 1886 Kamchadal

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 On the morning of August 22d we came for the first time to a
137 *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our
132 course—for we were on what a native would doubtless call the
487 "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

29:Cochrane T-2(1821-22)1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

273 Another great cause of this ravage in population
435 has arisen from the introduction of spirits: a Kamt-
563 chatdale will sell his last sable or fox for a glass
733 of it, though he is not physically strong enough to drink any thing of the kind. When it is considered that sixteen thousand bottles of this trash are consumed in the short period of three or four months by six or seven hundred people, we may well feel pity and surprise—pity for the poor women and children, and surprise at the means of getting either the money or sables. Such a quantity of spirit ought to sell for fifty thousand roubles, which is one hundred per cent. upon the price at Okotsk, but it is in reality sold for twice that sum. When it is recollected that officers, soldiers, sailors, merchants, and priests travel round the Peninsula for the purposes of trade, it will be less wonderful when I assert that each bottle of spirits sold to the Kamtchatdales, produces the value of ten and twelve shillings. Now allowing half the quantity imported (eight thousand bottles) to be consumed by the aborigines, this would produce from eighty to one hundred thousand roubles, while the cost is, in Okotsk, only twenty-five thousand. I have seen a bottle of spirits sold for a sable, and afterwards, when the party was drunk, a bottle of adulterated liquor has fetched the same price: in short, I have seen three and even four sables given for two bottles of spirits.

Allowing seven hundred and fifty families of the

29:Cochrane T-2 (1821-22)1824 Kamchadal

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Koriaks and Kamtchatdales, which is five to each family, and that half the quantity of imported spirit is consumed by them, it will appear that each family consumes at least twelve bottles in four months. By this plan the poor purchaser is drunk for days together, and for the rest of the year can get nothing to cheer him under his depression. The cost of that spirit to the Kamtchatdales is one hundred and fifty or two hundred roubles, a prodigious sum for a poor family to expend upon an article so pernicious in its moral and physical effects. Such a sum of money in Kamtchatka would produce near six or eight hundred pounds weight of flour; enough to support a small family during a whole year: or, such a sum would enable them to purchase proper clothing, culinary utensils, nets, twine, tobacco, axes, and knives. The evil of these grog-shops is carried to so ruinous an extent, that the children of the natives are left for three and four days without any food, save yukola, dried fish, doled out to them one or twice within that time. I have known instances of mothers and children being left without any means of support, in consequence of the retailing of such trash being allowed. The yukola and the bark of trees is, in such cases, almost the only nourishment the women and children can procure for several days. If they happen to be possessed of a cow, they are considered very fortunate. It needs little philosophy to prove that it is only by taking care of the rising

29:Cochrane T-2(1821-22)1824 Kamchadal

273 generation that the stock itself can be preserved,
435 which will not long be possible, if spirit continue
563 to be transported and retailed out as it now is.—
R While making these reflections in England, I am
177 aware that the Russian Government have desisted
.27 from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

651 The abuses arising from the collection of the
661 yasack are most cruel. The yasack itself is incon-
R siderable, but from the arbitrary manner in which
177 it is collected, it is rendered odious and oppressive.
.65 The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

29:Cochrane T-2 (1821-22) 1824 Kamchadal

651 sum of money to pay travelling expenses, it seems
661 very strange that such money is not paid to these
563 poor people. As little can I understand why a post
R should travel gratis: surely the poorest and most
177 distant part of the Russian empire, should not be
.66 oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

7: Lesseps T-3 (1787-88) 1790 Kamchadal

436 R. 177.43 of ten roubles; the rouble, and half rouble. There are very few ſilver coins below this value; a proof that no article of merchandize is expected to produce leſs than half a rouble. Copper and paper money have not yet reached this peninſula. A variety of old ſilver coins of the times of Peter I. Catherine I. and Elizabeth, abound here. A conſiderable branch of commerce may be made of them; the ſilver is purer and more valuable than that of common coins.

465 R. 177.46 The pay of the ſoldiers or Coſſacs is fifteen roubles a year. The officers ſent by government to ſo diſtant a country, receive double ſalaries.

631 R. 177.63 The peninſula of Kamtſchatka, when major Behm preſided at Bolcheretſk, was under the juriſdiction of the government general of Irkoutſk. Upon the departure of this governor, whom the Engliſh ſaw upon

28: Sarytschew--70 T-1 (1789-90) 1806 Kamchadal
116, 177, 436 Russia
636.43

"Copper money is scarcely known in Kamtschatka, silver coin only being in use; but small notes or assignations are beginning to get introduced."

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 583
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

paid in furrs of different ſorts. In fine, the exchange of goods with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, notwithſtanding all expences occaſioned by the diſtance, dearneſs of tranſport, and other difficulties, we may reckon that a 1000 rubles will produce 4000, provided they remain but one year in *Kamtſchatka*; but if they remain longer, there is a conſiderable loſs. The reaſons of this are, firſt, that upon their arrival, being flattered with the high prices of things, they ſell every thing, even their own cloaths and proviſions, hoping ſoon to leave the country, in which if diſappointed, they are obliged to buy them back again at double price: ſecondly, that the furrs by lying, loſe their colour and value: thirdly, that the place is exceſſively expenſive in regard to lodging, warehouſe-room, victuals, and ſeveral other particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce of *Ruſſia*, are *European* goods, from *Siberia*, *Boharia*, and the *Calmuks*. From *Europe* they receive coarſe cloaths of various colours, linen, ſerges, knives, ſilk and cotton handkerchiefs, red wine, a little ſugar, tobacco, and ſeveral toys. From *Siberia*, iron, ſeveral iron and copper veſſels, and inſtruments, ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp, yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth. From *Boharia*, and the country of the *Calmuks*, they bring ſeveral different ſorts of cotton goods. From *China*, ſeveral ſilk and cotton ſtuffs, tobacco, coral, and needles, which are much preferred to thoſe from *Ruſſia*. From the *Koreki* they receive great quantities of rein-deer-ſkins, both dreſſed and undreſſed, which they may ſell in what quantities they pleaſe at any time. Merchants muſt take care not to have too great a ſtock of any other goods; for the inhabitants of this place, *Ruſſians* as well as natives, never buy any thing before they are in abſolute want of it, even if they could buy it at half price.

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441 The goods ſold at *Kamtſchatka* at prime-coſt ſcarcely exceed 10 or 12,000 rubles, but the ſales amount to 30 or 40,000 rubles; and if a merchant carries theſe *Kamtſchatka* goods to the fair upon the frontiers of *China*, he may receive double the price he buys them at; ſo that this commerce may eaſily appear to be very advantageous.

439 651 437 The goods that are brought out of *Kamtſchatka* conſiſt of furrs, ſuch as ſea beavers', ſables', foxes', and a few otters' ſkins. As there was formerly no money in this country, the way of trading was in exchange for furrs; and now they have money, they fix the price by the ſkins, reckoning a good fox-ſkin at a ruble. All goods brought out of *Kamtſchatka* pay 10 per cent. duty, but the ſables 12.

CHAP. VIII.

000 *The Different* ROADS *between* Jakutſki *and* Kamtſchatka.

THOUGH it may at firſt appear needleſs to mention all the different roads to *Kamtſchatka*, eſpecially as ſeveral of them are now no more uſed, yet, upon due conſideration it will be found to ſerve for an illuſtration of the different ſettlements of the *Ruſſian* colonies, and to ſhew what people are ſubject and pay taxes to each of theſe ſettlements. It will alſo explain the manner of reducing theſe people and making them tributary, and deſcribe the difficulties of this journey, although there had been no danger from an enemy, in which the tax-gatherers were continually expoſed to hunger and cold in an unknown country, whereby many of them loſt their lives. The Coſſacks were only able to make this journey

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 provifions ſent from Okotſk, and convey them from the mouth of the Bolchaïa-reka to Bolcheretſk. The reſt of the inhabitants are compoſed of merchants and ſailors.

563 437 273 Theſe people, Ruſſians and Coſſacs, together with a mixed breed found among them, carry on a clandeſtine commerce, ſometimes in one article, and ſometimes in another; it varies as often as they ſee any reaſon for changing it; but it is never with a view of enriching themſelves by honeſt means. Their induſtry is a continual knaviſhneſs; it is ſolely employed in cheating the poor Kamtſchadales, whoſe credulity and inſuperable propenſity to drunkenneſs, leave them entirely at the mercy of theſe dangerous plunderers. Like our mountebanks, and other knaves of this kind, they go from village to village to inveigle the too ſilly natives: they propoſe to ſell them brandy, which they artfully preſent to them

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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to taste. It is almost impossible for a Kamtschadale, male or female, to refuse this offer. The first essay is followed by many others; presently their heads become affected, they are intoxicated, and the craft of the tempters succeed. No sooner are they arrived to a state of inebriety, than these pilferers know how to obtain from them the barter of their most valuable effects, that is, their whole stock of furs, frequently the fruit of the labour of a whole season, which was to enable them to pay their tribute to the crown, and procure perhaps subsistance for a whole family. But no consideration can stop a Kamtschadale drunkard; every thing is forgotten, every thing is sacrificed to the gratification of his appetite, and the momentary pleasure of swallowing a few glasses of brandy*, reduces

* This is well known to be the ruling passion of all the people of the north; but I have had more than one occasion to observe, that the Kamtschadales are inferior in this respect

7: Lesseps T-3 (1787-88) 1790 Kamchadal

437 dices him to the utmoſt wretchedneſs.
273 Nor is it poſſible for the moſt painful expe-
563 rience to put them on their guard againſt their own weakneſs, or the cunning perfidy of theſe traders, who in their turn drink,

reſpect to none of them. The following ſtory, among others, was told me, that I might be able to judge of the rapacity of theſe vagabond traders, and the ſtupid prodigality of their dupes.

A Kamtſchadale had given a ſable for a glaſs of brandy. Inflamed with a deſire of drinking another, he invited the ſeller into his houſe. The merchant thanked him, but ſaid he was in a hurry. The Kamtſchadale renewed his ſolicitations, and propoſed a ſecond bargain: he prevailed.—" Come, another glaſs for this ſable, it is a finer " one than the firſt.—No; I muſt keep the reſt of my " brandy; I have promiſed to ſell it at ſuch a place, and I " muſt be gone.—Stay a moment; here are two ſables.— " 'Tis all in vain.—Well, come, I will add another.— " Agreed, drink." Meanwhile the three ſables are ſeized, and the hypocrite makes a freſh pretence to come away: his hoſt redoubles his importunities to retain him, and demands a third glaſs: further refuſals and further offers: the higher the chapman raiſes his price, the more the Kamtſchadale is prodigal of his furs. Who would have ſuppoſed that it would have ended in the ſacrifice of ſeven moſt beautiful ſables for this laſt glaſs! they were all he had.

7:Lesseps T-3 (1787-88)1790 Kamchadal

273 in like manner, all the profits of their
437 knavery.

273 I ſhall terminate the article of commerce
435 by adding, that the perſons who deal moſt
439 in wholeſale, are merely agents of the merchants of Totma, Vologda, Grand Uſtiug, and different towns of Siberia, or the factors of other opulent traders, who extend even to this diſtant country their commercial ſpeculations.

All the wares and proviſions, which neceſſity obliges them to purchaſe from the magazines, are ſold exceſſively dear, and at about ten times the current price at Moſcow. A *vedro** of French brandy coſts eighty roubles†. The merchants are al-

* A Ruſſian meaſure containing from fifteen to twenty quarts.

† Eighteen pounds ſterling, eſtimating the rouble at four ſhillings and ſixpence.

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29:Cochrane T-2 (1821-22) 1824 Kamchadal

651 sum of money to pay travelling expenses, it seems
661 very strange that such money is not paid to these
563 poor people. As little can I understand why a post
R should travel gratis: surely the poorest and most
177 distant part of the Russian empire, should not be
.66 oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to be held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single man pays a heavy tax, a married man a heavier, and a father the heaviest of all. Such conduct is bad policy on the part of government, and carries with it more the appearance of a wish to extinguish than to increase the population of Siberia.

437 I have already commented upon the evil effects
563 arising from forced levies, and forced services; of
661 the transport of flour, salt, spirits, the post, as well
R as officers from one place to another without any
177 remuneration to the inhabitants. Of the conduct of
.66 these travelling gentlemen, high and low, it will be sufficient to give a specimen. The officer, upon arriving at a village, is received by the Toion or

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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Chief, and conducted to the warmest and cleanest part of the yourte. His upper garments are taken from him, cleared of the snow and put out in the open air for the night; it being understood that the colder the dress is put on in a cold country, the warmer it ultimately becomes. The landlady, or Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

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I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 *March*, when it is washed away again by the high water arising
226 from the melting of the snow; which happens regularly every year. The herrings come every day to the mouth of the outlet, as if to inform themselves whether the passage was yet open, and remain there from morning 'till evening, when they return to the deeper part of the lake. The *Kamtschadales* observing this, break holes in the ice near the mouth of the outlet, where they put down their nets, and catch great quantities. This fishery continues so long as the ice remains upon the lake. They catch them likewise with nets in the summer, at the mouths of the rivers;
262 when they boil out the fat, which is as white as butter, and more
438 delicate than that of any other fish; and send it from the lower *Kamtschatkoy* fort (where the greatest quantity is made) as a rare present, to the other forts.

CHAP. X.

Of the BIRDS.

136 *KAMTSCHATKA* abounds in birds, but the in-
223 habitants make less use of them than of roots and fishes:
433 the reason of this is, that they don't well know how to catch them; and their fishery is so advantageous to them, that to leave that and go a bird-catching would be as ridiculous as for the husbandman to leave his plough and go a shooting.

136 I shall here divide the birds into three classes: the first, sea fowls; the second, the fresh-water fowls; and the third, those which frequent the woods and fields.

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 589
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

000 ſoon puniſhed. After having travelled a conſiderable number of werſts upon the Kamtſchatka, which I had been delighted to find again, and the width of which in this place particularly ſtruck me, I was obliged to quit it and enter a ſort of ſtrait, where the ſnow, driven by the hurricanes, preſented an uneven and deceitful ſurface. It was impoſſible to ſee or avoid the rocks that ſurrounded me. I preſently heard a crack that told me my ſledge was damaged; it was in reality one of my ſkates broken in two. My guides aſſiſted me in adjuſting it in the beſt manner we could, and we had the good fortune to reach Ouchkoff without any other accident. It was midnight, and we travelled this day ſixty-ſix werſts. My firſt care was to refit my ſledge, which detained me till the next day.

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There are in this village one iſba, and eleven balagans; the number of inhabitants is

7: Lesseps T-3 (1787-88) 1790 Kamchadal

is reduced to five families, who are divided into three yourts. In the neighbourhood is a lake which abounds ſo much with fiſh, that all the villages round reſort to it for their winter ſtock. It is alſo a conſiderable reſource for the capital, which would otherwiſe be almoſt deſtitute of a proviſion of the firſt neceſſity throughout the peninſula.

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I left Ouchkoff early in the morning, and at noon had travelled forty-four werſts, partly upon the Kamtſchatka, and partly acroſs extenſive heaths. The firſt village I came to was Kreſtoff. It was a little larger than the preceding oſtrog, but ſimilar in other reſpects to what I had before ſeen. I only ſtayed to change my dogs. Hitherto I had purſued the road which M. Kaſloff was to take to get to Yelofki; but inſtead of proceeding like him to Khartchina, I directed my courſe, upon coming out of

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22: Guillemard T-2 (1882) 1886 Kamchadal

load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward, the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

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22: Guillemard T-2 (1882) 1886 Kamchadal

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

[see page 74--Analyst]

29:Cochrane T-2 (1821-22) 1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way. 133 123 782 777

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh- 133 137 372 313 342 [101] 122 439

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

161 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and vo-
651 luntarily pay a tribute in beavers and foxes. The author concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

000 hours' time. It was the white of an egg, with ſome camphire and ſugar, which he rubbed 'till it foamed upon a pewter plate, then tied it in a handkerchief, and bound it upon the forehead. This he found to ſucceed in every inflammation of the eyes.

132 It hails frequently both in ſummer and harveſt; but I never ſaw the hail bigger than peaſe. It ſeldom lightens but at the ſummer ſolſtice. The thunder is alſo but ſeldom heard, and then ſeems to be at a great diſtance. We have no inſtance of any one killed by thunder: the natives ſay, indeed, that before the arrival of the *Ruſſians* they had a great thunder, and ſome were killed by it; but this is to be queſtioned, ſince for ſo long a time we have had no inſtances of it. As to fogs, it is impoſſible that there ſhould be greater any where than at *Kamtſchatka*; and it is to be queſtioned whether deeper ſnows fall any where between 55 and 52 degrees north latitude than here, from the melting of which the rivers ſwell ſo much as to overflow their banks, and the earth in the ſpring is entirely covered with water. The cold in winter is moſt intenſe about the Great River and the *Awatſcha*; but in the lower *Kamtſchatkoi Oſtrog* it is much warmer than in any other place of *Siberia* in the ſame latitude.

The greateſt inconveniency ariſes from the violent winds and ſtorms, concerning which the following remarks may not be improper. Before a great wind, which generally comes from the eaſt, the air is always thick and dark; but, as I had not a thermometer, I cannot be certain if it is warmer then than at other times. The eaſt winds coming from the *Lopatka*, where are burning mountains and warm ſprings, I imagine that they not only ariſe from the narrowneſs of the land, but alſo from ſubterraneous fires and vapours.

135 258 439 With regard to other advantages or diſadvantages of this country, one may ſay in general, that its greateſt riches conſiſt in plenty of good furs and fiſh, and its greateſt inconveniences in the want of iron and ſalt. The firſt they are ſupplied with from other

other places, and the ſecond by boiling ſea water into ſalt; but the troubleſome diſtant carriage of the iron, and the boiling of the ſalt, are attended with ſuch expence and difficulty, that they are both ſold at a moſt intolerable price. One cannot buy a common ax under two rubles, and a pound of ſalt coſts four rubles.

CHAP. II.

Of the VOLCANO's *or* BURNING MOUNTAINS.

THERE are three burning mountains in *Kamtſchatka*, the *Awachinſky*, the *Tulbatchinſky*, and the *Kamtſchatka*.

The *Awachinſky* mountain ſtands upon the north ſide of the bay of *Awatſcha*, at a good diſtance indeed, but its bottom reaches to the very bay; and all the high mountains, near one half of their height, are made up, as it were, of rows of hills ſet one upon another, and the top they call the *Shatſe*, or tent, which is always naked, but the lower parts are generally covered with wood.

Theſe mountains for many years throw out a continual ſmoke, but flame only at times. The moſt terrible fire happened, as the *Kamtſchadales* ſay, in the ſummer of the year 1737; but this laſted no longer than 24 hours, and concluded by throwing out a vaſt cloud of aſhes, which covered the adjacent parts the depth of a verſhoke *.

* A verſhoke is the $\frac{1}{16}$ of the *Ruſſian* arſhin, which contains 27 inches.

CHAP. IV.

Of the METALS *and* MINERALS.

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ALTHOUGH the peninſula of *Kamtſchatka* is hilly, and the ground ſuch as might naturally be ſuppoſed to produce metals and minerals, eſpecially iron and copper, with which *Siberia* abounds; yet hitherto little has been diſcovered. This is no proof that ſuch ores are not in *Kamtſchatka*; for, beſides that the *Kamtſchadales* are entirely unexperienced, the *Ruſſians* who live here have as yet given themſelves no trouble in the ſearch after metals; as they have ſuch large quantities of iron and copper inſtruments brought to them, that they have not only ſufficient for themſelves, but are alſo enabled to furniſh the *Kamtſchadales* and *Kuriles* with them at a very conſiderable profit. It is alſo to be conſidered, that the providing for their ſubſiſtance takes up ſo much of their time, that they can ſpare but little for any thing elſe; and moreover, the places proper for ſuch tryals are very difficult of acceſs: to which it may be added, that the frequent ſtorms and general inclemency of the weather are great hindrances to ſuch tryals; eſpecially when every neceſſary for the undertaking muſt be carried upon men's backs, for in the ſummer they can carry nothing upon dogs. It is reaſonable to preſume that ore might be found in *Kamtſchatka*, if it was worth while to ſearch for it. Copper ore has been found about the *Kurilſkoy* lake, and the *Ivovoy* bay; and a ſandy iron ore upon the banks of the ſeveral lakes and rivers; whence it is expected that there is iron ore in the hills from which theſe lakes and rivers riſe. Native ſulphur is gathered about the rivers *Kambalinſkoy* and *Oſernoi*, and the *Kronotzkoy* cape. The ſulphur

316 439 135 316 135

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 583
off their proviſions, or rather their girls, which is frequently practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life. They ſell the *Koreki* ſables, fox and white dog ſkins, dried muſhroons, or ſuch trifles; and receive in exchange cloaths made of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes, troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and without any ceremony makes known his wants, although perhaps he never had any acquaintance with that perſon before: the landlord is obliged to behave according to the cuſtom of the country; and bringing whatever his gueſt has occaſion for, gives it him. He afterwards returns the viſit, and muſt be received in the ſame manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt conſummate ignorance; and yet they are in ſome degree curious, and inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than God: they offer them ſacrifices upon every occaſion, and ſome carry little idols about them, or have them placed in their dwellings; but, with regard to God, they not only neglect to worſhip him; but, in caſe of troubles and misfortunes, they curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

412 a wooden handle. Of ſuch chryſtals were made likewiſe their
294 arrows, ſpears, and launcets, with which they continue ſtill to let blood. Their ſewing needles they made of the bones of ſables, with which they not only ſewed their cloaths together, but made alſo very curious embroidery.

177 In order to kindle fire they have a board of dry wood with
372 round holes in the ſides of it, and a ſmall round ſtick; this they rub in a hole 'till it takes fire, and inſtead of tinder they uſe dry graſs beat ſoft. Theſe inſtruments are held in ſuch eſteem by the *Kamtſchadales* that they are never without them, and they value them more than our ſteels and flints: but they are exceſ-
442 ſively fond of other iron inſtruments, ſuch as hatchets, knives,
177 or needles; nay, at the firſt arrival of the *Ruſſians* a piece of
325 broken iron was looked upon as a great preſent, and even yet they receive it with thankfulneſs, knowing how to make uſe of the leaſt fragment either to point their arrows or make darts, which they do by hammering it out cold between two ſtones. All the ſavage inhabitants of theſe parts are particularly fond of iron, and know how to manage it very
439 curiouſly. As ſome of them delight in war, the *Ruſſian*
325 merchants are forbid to ſell them any warlike inſtruments; but
415 they are ingenious enough to make ſpears and arrows out of the iron pots and kettles which they buy; and they are ſo dextrous
R 177 when the eye of a needle breaks as to make a new eye, which
.41 they will repeat until nothing remains but the point. Even at the time when I was there it was only the better ſort and thoſe that lived near to the *Ruſſians* that made uſe of iron or copper veſſels, the reſt ſtill preferring their wooden diſhes.

325 It is ſaid, that the *Kamtſchadales* knew the uſe of iron even
489 before the arrival of the *Ruſſians*; that they received it from the
177 *Japaneſe*, who came to the *Kurilſki* iſlands, and once to the mouth of the river *Kamtſchatka*; and that the name which the *Kamtſchadales* give the *Japaneſe* of *Shiſman* comes from *ſhiſh*,

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
177 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

his belly, being, as he ſaid, ordered to do it by the muſhroon. 276

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten. 276 439

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms. 535

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune. 533 534

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick 536 537

 for

for their diverſion in all their entertainments.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

and ſometimes they played 'till both parties had pawned their cloaths for brandy. Such way of living, one may eaſily believe, was attended with great confuſion; but what the poor ſlaves ſuffered is almoſt incredible, being obliged ſometimes to change their maſters twenty times a day.

The invention of making ſpirits happened accidentally. The Coſſacks, after the manner of the natives, made a great proviſion of all kinds of berries for the winter. It happened ſometimes that they began to ferment in the ſpring, and could be uſed no other way than in drink. This drink was obſerved to cauſe drunkenneſs when taken in great quantities; upon which they began to diſtil it, and, to their great ſurpriſe and pleaſure, found that it produced a good ſpirit. They have ſince diſcovered that they could make brandy from an infuſion of the ſweet graſs, and now they have ſpirits in plenty. Their method of preparing this herb for diſtillery we have already explained.

Thoſe that are curious to know whence the Coſſacks ſettled here obtained their riches, muſt be informed that they owe them to the following circumſtances: firſt, when they conquered the natives they made all the plunder they could: ſecondly, every party of Coſſacks, that was employed in gathering the taxes, obliged each tributary native, beſides the crown tax, to give them four fox-ſkins and one ſable, which they divided among themſelves: thirdly, by their commerce with the natives, whom they obliged to pay a very high price for every trifle they furniſhed them with. Although, at preſent, the Coſſacks are forbidden to take any thing more than the crown tax, yet they are ſtill allowed to ſet what price they pleaſe upon their goods; and indeed they ſell them, or change them for furrs, at very great profits, and ſometimes for proviſions, nets, and boats. Without this they would not be able to live upon their ſmall pay, which is no more than what they uſed to receive at *Jakutſki*, and, both in money and proviſions, does not amount to above 14 rubles

paid in furrs of different ſorts. In fine, the exchange of goods 569
with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, not- 441
withſtanding all expences occaſioned by the diſtance, dearneſs of
tranſport, and other difficulties, we may reckon that a 1000
rubles will produce 4000, provided they remain but one year in
Kamtſchatka; but if they remain longer, there is a conſiderable
loſs. The reaſons of this are, firſt, that upon their arrival, being
flattered with the high prices of things, they ſell every thing, even
their own cloaths and proviſions, hoping ſoon to leave the country,
in which if diſappointed, they are obliged to buy them back
again at double price: ſecondly, that the furrs by lying, loſe their
colour and value: thirdly, that the place is exceſſively expenſive
in regard to lodging, warehouſe-room, victuals, and ſeveral other
particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce 439
of *Ruſſia*, are *European* goods, from *Siberia*, *Bobaria*, and the
Calmuks. From *Europe* they receive coarſe cloaths of various
colours, linen, ſerges, knives, ſilk and cotton handkerchiefs,
red wine, a little ſugar, tobacco, and ſeveral toys. From
Siberia, iron, ſeveral iron and copper veſſels, and inſtruments,
ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp,
yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth.
From *Bobaria*, and the country of the *Calmuks*, they bring ſe-
veral different ſorts of cotton goods. From *China*, ſeveral ſilk
and cotton ſtuffs, tobacco, coral, and needles, which are much
preferred to thoſe from *Ruſſia*. From the *Koreki* they receive
great quantities of rein-deer-ſkins, both dreſſed and undreſſed,
which they may ſell in what quantities they pleaſe at any
time. Merchants muſt take care not to have too great a ſtock 437
of any other goods; for the inhabitants of this place, *Ruſſians* 511
as well as natives, never buy any thing before they are in abſolute
want of it, even if they could buy it at half price.

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441 The goods ſold at *Kamtſchatka* at prime-coſt ſcarcely exceed 10 or 12,000 rubles, but the ſales amount to 30 or 40,000 rubles; and if a merchant carries theſe *Kamtſchatka* goods to the fair upon the frontiers of *China*, he may receive double the price he buys them at; ſo that this commerce may eaſily appear to be very advantageous.

439 651 437 The goods that are brought out of *Kamtſchatka* conſiſt of furrs, ſuch as ſea beavers', ſables', foxes', and a few otters' ſkins. As there was formerly no money in this country, the way of trading was in exchange for furrs; and now they have money, they fix the price by the ſkins, reckoning a good fox-ſkin at a ruble. All goods brought out of *Kamtſchatka* pay 10 per cent. duty, but the ſables 12.

CHAP. VIII.

000 *The Different* ROADS *between* Jakutſki *and* Kamtſchatka.

THOUGH it may at firſt appear needleſs to mention all the different roads to *Kamtſchatka*, eſpecially as ſeveral of them are now no more uſed, yet, upon due conſideration it will be found to ſerve for an illuſtration of the different ſettlements of the *Ruſſian* colonies, and to ſhew what people are ſubject and pay taxes to each of theſe ſettlements. It will alſo explain the manner of reducing theſe people and making them tributary, and deſcribe the difficulties of this journey, although there had been no danger from an enemy, in which the tax-gatherers were continually expoſed to hunger and cold in an unknown country, whereby many of them loſt their lives. The Coſſacks were only able to make this journey

CHAPTER V

METALS IN THE PREHISTORIC KAMCHATKA

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In the beginning of the seventeenth century the Japanese Government prohibited all navigation beyond its home waters, and before the Russians conquered Kamchatka the Kamchadal were not acquainted with the use of metals. However, there is no doubt that some iron instruments and other Japanese goods had reached Kamchatka through the Kurilians, even before the Russian invasion. Mr. Torii says that the Japanese never traded directly with Kamchatka, as contended by Bogoras.[1] The Japanese, according to Torii, exchanged their goods with the Ainos of Yezo. The latter sold them to their Kurilian kin at the regular fairs on the Island Rasava, and the Kurilians delivered them to the Kamchadal and the Kamchadal brought them to the Koryak and Chukchee. Thus the Kamchadal got from the Kurilians swords, needles, iron pans, cotton stuff, dresses made of bark fiber, armors, plumb and silver earrings, belts with silver buckles, in exchange for fur-skins, before the Russians introduced metallic objects to them. In the excavations in many pits on the shores of the Kuril Lake, I found brass coins of the eleventh century, according to the decision of Professor Koganei, to whom I showed the coins. As the coins were only of one period we may draw the conclusion that at that period the Japanese trade with Kamchatka, through the Aino-Kurilian intermediary, was quite extensive.[2] The old Japanese coins had a hole in the center and it might be that Kamchadal women wore them as ornaments.

However, these trivial borrowings from the Japanese culture were quite insignificant and scanty and the real transition from the neolithic period to a metallic stage had taken place under the influence of the Russians, who brought to Kamchatka iron, copper, bronze and silver instruments, vessels and ornaments.

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It was not so in central and western Siberia. There the Russians found old seats of metallic production. As the Russian invaders were chiefly warriors and not artisans they had to have recourse in their needs to native metal workers and iron smelters.

METALS IN SIBERIA

Siberia, as we have said, was acquainted with the use and manufacture of metallic objects, reduction of metals from their ores and making alloys before the Russian conquest. But the historical development of metallurgy in some places of Siberia was different from that of Europe.

[1] See Waldemar Bogoras, *The Chukchee*, p. 54.

[2] According to Krashenninikoff (vol. ii, p. 69, in Russian) the Kamchadal called a needle "ddih" and the Japanese as provenance of needles "ddihanan."

[Pp. 22-36 have not been included in the file --Analyst]

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 541 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7:Lesseps T-3 (1787-88)1790 Kamchadal

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To understand the nature, and estimate the utility of this project, nothing more is necessary

selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

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An English ship, belonging to M. Lanz, a merchant of Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had sailed, in

7:Lesseps T-3 (1787-88)1790 Kamchadal

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ceſſary than to have an idea of the extent and form of the bay of Avatſcha, and the port in queſtion. We have already many accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

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in order to begin its cargo, which it expected to complete at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

7:Lesseps T-3 (1787-88)1790 Kamchadal

273 437 in like manner, all the profits of their knavery.

273 435 439 I ſhall terminate the article of commerce by adding, that the perſons who deal moſt in wholeſale, are merely agents of the merchants of Totma, Vologda, Grand Uſtiug, and different towns of Siberia, or the factors of other opulent traders, who extend even to this diſtant country their commercial ſpeculations.

All the wares and proviſions, which neceſſity obliges them to purchaſe from the magazines, are ſold exceſſively dear, and at about ten times the current price at Moſcow. A *vedro** of French brandy coſts eighty roubles†. The merchants are al-

* A Ruſſian meaſure containing from fifteen to twenty quarts.

† Eighteen pounds ſterling, eſtimating the rouble at four ſhillings and ſixpence.

lowed

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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lowed to traffic in this article; but the brandy, diſtilled from corn, which is brought from Okotſk, and that produced by the country, which is diſtilled from the *ſlatkaia-trava*, or ſweet herb, are ſold, upon government account, at forty one roubles ninety-ſix kopecks* the vedro. They can be ſold only in the *kabacs*, or public houſes, opened for that purpoſe. At Okotſk, the price of brandy diſtilled from corn is no more than eighteen roubles the vedro; ſo that the expence of freight is charged at twenty-three roubles ninety-ſix kopecks, which appears exorbitant, and enables us to form ſome judgment of the accruing profit.

The reſt of the merchandize conſiſts of nankins and other China ſtuffs, together with various commodities of Ruſſian and foreign manufacture, as ribands, handker-

* Nine pounds nine ſhillings.

7:Lesseps T-3 (1787-88)1790 Kamchadal

439/177 chiefs, ſtockings, caps, ſhoes, boots, and other articles of European dreſs, which may be regarded as luxuries, compared with the extreme ſimplicity of apparel of the Kamtſchadales. Among the proviſion imported, there are ſugar, tea, a ſmall quantity of coffee, ſome wine, but very little, biſcuits, confections, or dried fruits, as prunes, raiſins, &c. and laſtly, candles, both wax and tallow, powder, ſhot, &c.

The ſcarcity of all theſe articles in ſo diſtant a country, and the need, whether natural or artificial, which there is for them, enable the merchants to ſell them at whatever exorbitant price their voracity may affix. In common, they are diſpoſed of almoſt immediately upon their arrival. The merchants keep ſhops, each of them occupying one of the huts oppoſite the guard-houſe; theſe ſhops are open every day, except feaſt days.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

177 291 563 The inhabitants of Bolcheretſk differ not from the Kamtſcadales in their mode of living; they are leſs ſatisfied, however, with balagans, and their houſes are a little cleaner.

Their clothing is the ſame. The outer garment, which is called *parque*, is like a waggoner's frock, and is made of the ſkins of deer, or other animals, tanned on one ſide. They wear under this long breeches of ſimilar leather, and next the ſkin a very ſhort and tight ſhirt, either of nankin or cotton ſtuff; the women's are of ſilk, which is a luxury among them. Both ſexes wear boots; in ſummer, of goats or dogs ſkins tanned; and in winter, of the ſkins of ſea wolves, or the legs of rein deer*. The men conſtantly wear fur caps; in the mild ſeaſon they put on longer ſhirts of nankin,

439 *Articles of apparel made of the ſkins of rein deer are procured from the Koriacs.

7:Lesseps T-3 (1787-88)1790 Kamchadal

252 439 273 when they use it in their ragouts, it is previously boiled. Brandy is also distilled from this sweet herb, which, as I observed before, is sold on account of government: for this purpose the plant is purchased of the Kamtschadales*.

162 563 There are three sorts of inhabitants, the natives or Kamtschadales, the Russians and Cossacs, and the descendants from intermarriages.

The indigenes, that is, those whose blood is unmixed, are few in number; the small pox has carried off three fourths of them, and the few that are left are dispersed through the different ostrogs of the peninsula; in Bolcheretsk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is sure to be extremely agitated during the night, and to feel the next day as melancholy and restless as if he had committed some crime.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 314 439 * Their nets are made of pack thread, like ours; they purchaſe it of the Ruſſians: there is another kind however, which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by

22: Guillemard T-2 (1882) 1886 Kamchadal

Every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2(1821-22)1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2(1821-22)1824 Kamchadal

651 sum of money to pay travelling expenses, it seems
661 very strange that such money is not paid to these
563 poor people. As little can I understand why a post
R should travel gratis: surely the poorest and most
177 distant part of the Russian empire, should not be
.66 oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

29:Cochrane T-2(1821-22)1824 Kamchadal

661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to he held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

2: Schrenck--407 (1854-1856) 1881-1895 RX2 Gilyak
Historical Manchuria AG2
Feudal Japan AB2
Kamchadal RY3

H.M. 101 174 /192/ At the same time, however, he also calls attention to the fact that if in the place in the Rubruquis at which the Taule and Manse peoples are mentioned (1) "Taule" is taken to stand

H.M. [113]

1. Marthe, "Taule et Manse" (Zeitschrift der Gesellschaft für Erdk. 475 ff). The passage concerned in the Rubruquis runs: " "Magister W. told me that he himself had seen messengers of certain peoples who call themselves Taule and Manse, who live on islands where the sea around freezes in winter so that then the Tatars are able to cross over to them" /translated from the Latin/.

for "Caule," that is, Kaoli, meaning Korea, it follows that the Man-dse were found in or near Korea even before Kublai Khan's colonies, to which the Russian sources want to trace back the introduction of this name in the Ussuri region. Along with Marthe, however, we shall naturally leave the final solution of this question to the historians and Sinologists.

FJ. 101 121 It remains for us to discuss the names customary among the Amur peoples for the third of the East Asiatic civilized peoples with whom they come in contact, the Japanese. As is well known, Steller (2) reports that the Kamchadal or Italmen call

K F.J. 101 439 K 192 [113]

2. Beschreibung von dem Lande Kamtschatka /Description of the Kamchatka Region/, pp. 3, 249, 320.

the Japanese "Sühsaman" or "Sühsemen," and they do this, as is expressly noted by him, because the Japanese brought them the first iron needles, whereas up to this time they had made them for themselves out of sable bones; in the Italmen, and in all dialects, the needle is called sühse. Krascheninnikof (3)

K [113]

3. "Opisanie zemli Kamchatki /Description

2: Schrenck--408 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Feudal Japan A82
Kamchadal RY3
Goldi RX3
Southeast Siberia RX1

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3. (cont.)
of the Kamchatka Region/" (Poln. sobr. uchen. puteshestvii po Rossii, Vol. II, p. 49).

says the same, but more vaguely and evidently repeating Steller; according to him, however, Italmen needles are supposedly called "schischj," and, accordingly, the Japanese, "Schischaman." The following will show that this explanation is wrong and based on a misunderstanding. Names for the Japanese quite similar to those used by the Kamchadal are used by the Amur peoples, at least those on the island of Sakhalin and along the lower course of the Amur. The Gilyak on the mainland and on the island call them "Ssisam" (4), and the Olcha and Goldi, "Ssissa" (5).[2]

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4. Therefore, when in a handwritten document from 1744 found by Middendorff in the archives of Udskoi Ostrog there is mention of the "Ssysaizy," who are said to have destroyed a vessel in the mouth of the Amur (cf. his Reise in den äuss. Nord. etc., Vol. IV, p. 165), it is undoubtedly the Japanese who are being referred to by their Gilyak name transformed by the Russians. Middendorf himself, by the way, had heard the name "Ssissan" among the Gilyak along the Sea of Okhotsk, but he thought that it referred to the southern Kurile Islands (cf. Bull. de la cl. physico-math. de l'Acad. Imp. des sc., Vol. IV, p. 233; also Beitr. zur Kenntn. des Russ. Reiches, Vol. IX, Part 2, p. 615).

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[2] [Footnote "(5)" appears on p. 409 -- Analyst]

2: Schrenck--895 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu ABG

/571 cont./

000 K 177 192 174 325

Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

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2: Schrenck--896 E-5 (1854-1856) 1881-1895 RX2 Gilyak RX2
Kamchadal RY3
Ainu AB6

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their eyes, of course, were surrounded with the aura of great wealth and esteem, made those knives, swords, and the like which they themselves (the Ainu) prized so highly and paid for so dearly in trade with them. How very much this was the case can be seen from Steller's information that the Kurile Ainu gladly gave 20 sea beavers for an old Japanese saber and thought that they had made a very good trade, but wore such sabers only on festive days or during festive processions and made "the strangest figures during the welcoming" with them.

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For the moment it must remain undecided whether the above-mentioned iron needles, which came from Japan to the Kamchadal as their first iron implements, spread from the latter to their neighbors, the Koryak and the Chukchee, before iron was brought these peoples by the Russians. At any rate, three Paleo-Asiatic peoples, the Ainu, the Gilyak, and the Kamchadal, received iron from Japan, and this was a natural consequence of the geographical position of the latter in the vicinity of these peoples, for just to the north of Nippon, the principal island of Japan, is the island of Jesso, the principal region of the Ainu (1),

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1. The view advanced chiefly by Ph. Siebold that the Ainu formerly also inhabited the north of Nippon (see above, p. 255) has recently been attacked by Brauns ("Die Bewohner des Japanischen Inselreichs /The Inhabitants of the Japanese Island-Realm/" in the Jahresber. des Frankfurter Vereins für Geogr. u. Statist., Years 48 and 49, 1883-1884, 1884-1885, Scientific Part, pp. 5 ff).

which, in turn, on the one hand, leads to the half-Gilyak Sakhalin, and, on the other hand, via the chain of the Kuriles, to Kamchatka. One may therefore draw the further conclusion that at the time when these peoples lived farther in the interior

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

rubles a year; and here they cannot maintain and cloath themselves for less than 40.

CHAP. VII.

Of their TRADE.

ALTHOUGH from the very beginning some people went along with the tax-gatherers, who carried little trifles to dispose of among the natives, these people could not be called merchants, because they did duty in the same manner as the Cossacks. By degrees many of them got themselves enrolled under that name, on paying the poll-tax, and as such settled with their families in these places; but the true merchants began to bring considerable quantities of goods first to *Ochotska*, and then to *Kamtschatka*, at the time when the second expedition to *Kamtschatka* took place. The number of the people increasing made the demand greater; and their profits were so considerable, that several, who came out of *Russia* as common labourers, in six or seven years began to trade for 15000 rubles or more: but, on the other hand, some were ruined from their extraordinary gains, which led them into various sorts of luxury and extravagance: and those merchants particularly who sent factors thither run the greatest risk; however, the principals had the satisfaction to find that the government took care to see justice done them.

After the expedition to *Kamtschatka* the trade began to be upon another footing, the officers and servants in this expedition buying their goods of the merchants for ready money; whereas they were obliged to give the inhabitants credit 'till they returned from their travelling among the *Kamtschadales*, when they were paid

paid in furrs of different ſorts. In fine, the exchange of goods 563
with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, not- 441
withſtanding all expences occaſioned by the diſtance, dearneſs of
tranſport, and other difficulties, we may reckon that a 1000
rubles will produce 4000, provided they remain but one year in
Kamtſchatka; but if they remain longer, there is a conſiderable
loſs. The reaſons of this are, firſt, that upon their arrival, being
flattered with the high prices of things, they ſell every thing, even
their own cloaths and proviſions, hoping ſoon to leave the country,
in which if diſappointed, they are obliged to buy them back
again at double price: ſecondly, that the furrs by lying, loſe their
colour and value: thirdly, that the place is exceſſively expenſive
in regard to lodging, warehouſe-room, victuals, and ſeveral other
particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce 439
of *Ruſſia*, are *European* goods, from *Siberia*, *Boharia*, and the
Calmuks. From *Europe* they receive coarſe cloaths of various
colours, linen, ſerges, knives, ſilk and cotton handkerchiefs,
red wine, a little ſugar, tobacco, and ſeveral toys. From
Siberia, iron, ſeveral iron and copper veſſels, and inſtruments,
ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp,
yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth.
From *Boharia*, and the country of the *Calmuks*, they bring ſe-
veral different ſorts of cotton goods. From *China*, ſeveral ſilk
and cotton ſtuffs, tobacco, coral, and needles, which are much
preferred to thoſe from *Ruſſia*. From the *Koreki* they receive
great quantities of rein-deer-ſkins, both dreſſed and undreſſed,
which they may ſell in what quantities they pleaſe at any
time. Merchants muſt take care not to have too great a ſtock 437
of any other goods; for the inhabitants of this place, *Ruſſians* 511
as well as natives, never buy any thing before they are in abſolute
want of it, even if they could buy it at half price.

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441 The goods ſold at *Kamtſchatka* at prime-coſt ſcarcely exceed 10 or 12,000 rubles, but the ſales amount to 30 or 40,000 rubles; and if a merchant carries theſe *Kamtſchatka* goods to the fair upon the frontiers of *China*, he may receive double the price he buys them at; ſo that this commerce may eaſily appear to be very advantageous.

439 651 437 The goods that are brought out of *Kamtſchatka* conſiſt of furrs, ſuch as ſea beavers', ſables', foxes', and a few otters' ſkins. As there was formerly no money in this country, the way of trading was in exchange for furrs; and now they have money, they fix the price by the ſkins, reckoning a good fox-ſkin at a ruble. All goods brought out of *Kamtſchatka* pay 10 per cent. duty, but the ſables 12.

CHAP. VIII.

000 *The Different* ROADS *between* Jakutſki *and* Kamtſchatka.

THOUGH it may at firſt appear needleſs to mention all the different roads to *Kamtſchatka*, eſpecially as ſeveral of them are now no more uſed, yet, upon due conſideration it will be found to ſerve for an illuſtration of the different ſettlements of the *Ruſſian* colonies, and to ſhew what people are ſubject and pay taxes to each of theſe ſettlements. It will alſo explain the manner of reducing theſe people and making them tributary, and deſcribe the difficulties of this journey, although there had been no danger from an enemy, in which the tax-gatherers were continually expoſed to hunger and cold in an unknown country, whereby many of them loſt their lives. The Coſſacks were only able to make this journey

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

29:Cochrane T-2(1821-22)1824 Kamchadal

651 sum of money to pay travelling expenses, it seems
661 very strange that such money is not paid to these
563 poor people. As little can I understand why a post
R should travel gratis: surely the poorest and most
177 distant part of the Russian empire, should not be
.66 oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

29:Cochrane T-2(1821-22)1824 Kamchadal

661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to be held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

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We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

22: Guillemard T-2 (1882) 1886 Kamchadal

224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

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[see page 74--analyst]

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kuriljkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

224 their own country, to whom for payment they are bound to
426 work the whole enſuing ſummer. Their baggage when they go
785 to hunt conſiſts of a net, a bow and arrows, a fire-ſteel with
461 flint and tinder. When they find a ſable concealed either in the earth or under the root of ſome tree, they throw the net over the place, in which he entangles himſelf when he comes out. With the bow and arrows they ſhoot them when they fly to the trees; and the ſteel and flint are to ſtrike fire, by which they ſmoke them, and drive them out of their holes. The beſt hunters, to be nearer the game, go out with their whole families to the hills, where they build huts and live the whole winter.

224 Although the ſtone foxes, and hares, abound in *Kamtſchatka*,
237 yet hardly any one thinks it worth his trouble to hunt them,
136 their furrs being of ſmall value; and when they fall into the fox traps, they uſe their ſkins as coverings in their beds. The *Kamtſchatka* ſtone foxes are little better than the hares of *Tourouchan*, which are very bad, the hair eaſily falling off. *Steller* relates, that ſome uſed to ſew the tails of the ſtone foxes to the hare-ſkins of *Tourouchan*, and impoſe them upon the ignorant as true ſtone fox-ſkins, the thickneſs of the ſkin and furr making it difficult to diſcover the cheat.

Marmottas * abound every where in *Kamtſchatka*. The *Koreki* uſe their ſkins for cloaths; and, indeed, they are reckoned no ordinary dreſs, being both light and warm. *Steller* compares
136 the furrs made of the backs of the marmottas to the ſpotted feathers of birds, eſpecially if ſeen at a diſtance; and he alſo ſays, that this animal is found both upon the continent and the

* Marmotta minor. GMEL.

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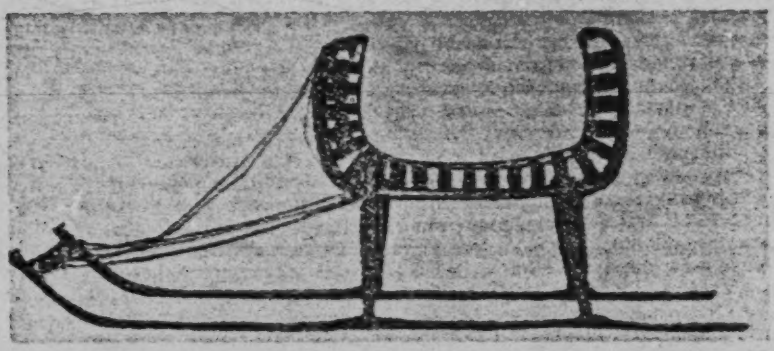

18th-century dogsled.

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[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[77] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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157 to oblige, if we conſider the natural and ex-
461 treme ſlothfulneſs of their diſpoſition. An
515 active life would be inſupportable to them; and the greateſt happineſs, in their eſtimation, next to that of getting drunk, is to have nothing to do, and to live for ever in tranquil indolence. This is carried ſo far with theſe people, as frequently to make them neglect the means of providing the indiſpenſable neceſſaries of life; and whole families are often reduced to all the ſeverities of famine, becauſe they would not take the pains of providing in ſummer a reſerve of fiſh, without which they are unable to live. If they neglect in this manner the preſervation of their exiſtence, it is not to be ſuppoſed that they are more attentive to the article of cleanlineſs; it diſplays itſelf neither in their perſons, nor their habitations; and they may juſtly be reproached for being addicted to the contrary

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

the ſettled *Koreki* and *Tchukotſkoi*, for want of proper timber and plank, make their baidars of the ſkins of ſea animals. 171 501

Theſe boats hold two perſons, one of which ſits in the prow and the other in the ſtern. They puſh them againſt the ſtream with poles, which is attended with great trouble: when the current is ſtrong they can ſcarcely advance two feet in ten minutes; notwithſtanding which, they will carry theſe boats full loaded ſometimes 20 verſts, and, when the ſtream is not very ſtrong, even 30 or 40 verſts.

In the larger boats they can carry 30 or 40 pood; and when the goods are not very heavy, they lay them upon a float or bridge made between two boats joined together. They uſe this method in tranſporting their proviſions down with the ſtream, and alſo to and from the iſlands.

CHAP. VI.

Of the LABOUR *appropriated to the* DIFFERENT SEXES. 221 462

IN the ſummer time the men are employed in catching, drying, and tranſporting fiſh to their habitations; in preparing bones and ſour fiſh to feed their dogs: the women, in cleaning the fiſh, and ſpreading it out to dry; and ſometimes they go a fiſhing with their huſbands. After their fiſhing is over, they gather in the herbs, roots, and berries, both for food and medicine.

In the harveſt the men catch the fiſh that appear at that time, and kill fowl, ſuch as geeſe, ducks, ſwans, and the like; they teach their dogs to draw carriages, and prepare wood for their

221 462 ſledges, and other uſes. The women at this time are buſy with their hemp of nettles, in pulling it up, watering, breaking, peeling, and laying it up in their balagans.

The men in the winter hunt for ſables and foxes, weave fiſhing nets, make ſledges, fetch wood, and bring their proviſions from ſeveral places, which they had prepared in the ſummer, and could not bring home in the harveſt. The women are principally employed in ſpinning thread for nets.

In the ſpring, when the rivers begin to thaw, the fiſh that wintered in them go towards the ſea; and the men are buſied in catching them or the ſea animals that at this time frequent the bays. The people upon the Eaſtern Ocean catch the ſea beaver.
462 All the women go into the fields, where they gather wild garlick,
221 and other young tender herbs, which they uſe not only in a ſcar-
262 city of other proviſion, which often happens at this ſeaſon of the year, but likewiſe out of luxury; for ſo fond are they of every thing that is green, that during the whole ſpring they are ſeldom without having ſome of it in their mouths; and though they always bring home a great bundle of greens, they ſeldom laſt them above a day.

462 Beſides the above-mentioned employments the men are obliged to build their huts and balagans, to heat their huts, dreſs victuals, feed their dogs, flea the animals, whoſe ſkins are uſed in cloathing, and provide all houſhold and warlike inſtruments: the women are here the only taylors and ſhoemakers, for they dreſs the ſkins, make the cloaths, ſhoes, and ſtockings: it is even a diſgrace for the men to do any thing of that ſort; ſo that they looked upon the *Ruſſians* who came here firſt in a very ridiculous light, when they ſaw them uſe either their needle or awl. The women are likewiſe employed in dying ſkins, in conjuration, and
281 curing of the ſick. Their method of preparing and dying ſkins, ſewing and joining them, is as follows: every ſkin which they uſe

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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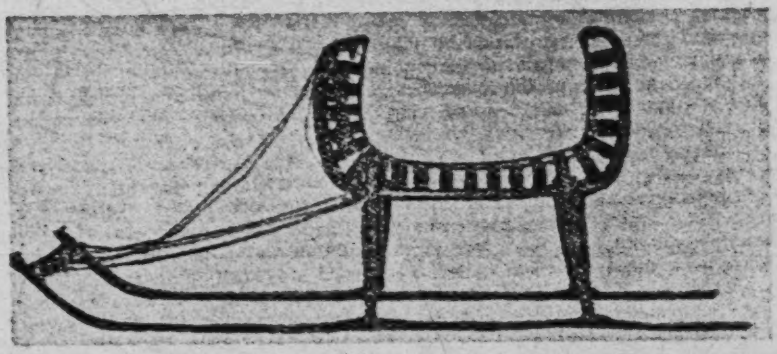

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7:Lesseps T-3 (1787-88)1790 Kamchadal

177 291 563 or of ſkin without hair; they are made like the parque, and anſwer the ſame purpoſe, that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 462 222 The principal food of theſe people conſiſts, as I have already obſerved, in dried fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamtſchadales

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 ſehadales and Ruſſians of this country.
222 When the women go out to make theſe har-
462 veſts for winter conſumption, it is high holy-
527 day with them, and the anniverſary is celebrated by a riotous and intemperate joy, that frequently gives riſe to the moſt extravagant and indecent ſcenes. They diſperſe in crouds through the country, ſinging and giving themſelves up to all the abſurdities which their imagination ſuggeſts; no conſideration of fear or modeſty reſtrains them. I cannot better deſcribe their licentious frenzy than by comparing it with the bacchanals of the Pagans. Ill betide the man whom chance conducts and delivers into their hands! however reſolute or however active he may be, it is impoſſible to evade the fate that awaits him; and it is ſeldom that he eſcapes, without receiving a ſevere flagellation.

Their proviſions are prepared nearly in the

6;Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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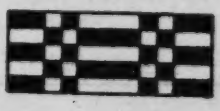


175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

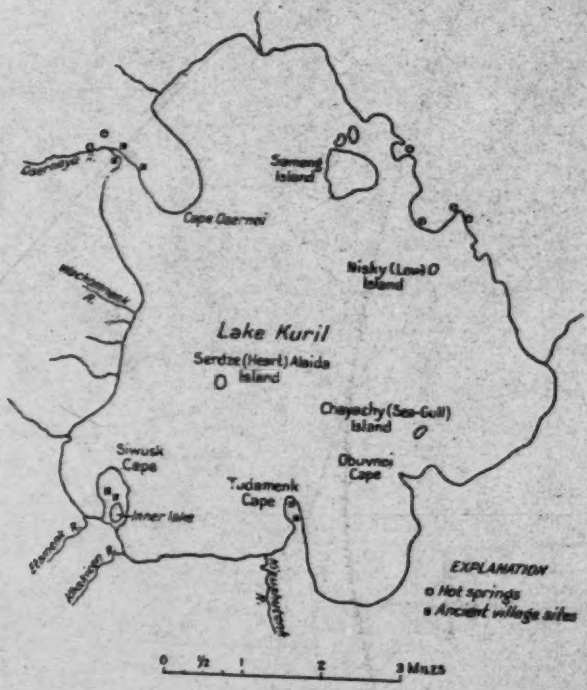
In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
568 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
563 eight winter months, but the summer was very busy. Scores of laborers were
228 brought on the company's steamers from the Amur River. Not all the necessary
464 structures were ready at that time, and the imported laborers slept under the cover of primitive shades. Mountains of salt lay in the open, melting from rains. A part of the laborers were busy preparing a kind of caviar from the roe of



63

228 salmon. After taking out the roe they threw overboard the split fish, causing an enormous waste of food-material. The laborers in the saltery and cannery threw out from their seines all other fish than salmon, and from the latter the hump-back salmon, which was not in favor with the foreman of the plant.

182 From information gathered before my trip to the lake I knew that there were
000 several pits of ancient dwellings (see the map of the Kuril Lake). The natives have either died out or were exterminated by the Russian conquerors. My party

7: Lesseps T-3 (1787-88) 1790 Kamchadal

436 R. 177.43 of ten roubles; the rouble, and half rouble. There are very few ſilver coins below this value; a proof that no article of merchandize is expected to produce leſs than half a rouble. Copper and paper money have not yet reached this peninſula. A variety of old ſilver coins of the times of Peter I. Catherine I. and Elizabeth, abound here. A conſiderable branch of commerce may be made of them; the ſilver is purer and more valuable than that of common coins.

465 R. 177.46 The pay of the ſoldiers or Coſſacs is fifteen roubles a year. The officers ſent by government to ſo diſtant a country, receive double ſalaries.

631 R. 177.63 The peninſula of Kamtſchatka, when major Behm preſided at Bolcheretſk, was under the juriſdiction of the government general of Irkoutſk. Upon the departure of this governor, whom the Engliſh ſaw upon

6: Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

The central figure of Itel'men mythology was the raven-creator, Kutkh.
[173] But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

The quelling of rebellions by armed force and the arbitrary rule of the
[161] local officials reduced the Itel'men population. But the principal reason
[731] for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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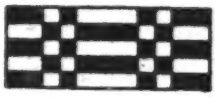

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

361

View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426 175

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 [192]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7:Lesseps T-3 (1787-88)1790 Kamchadal

142 The true Kamtſchadales are in general below the common height; their ſhape is round and ſquat, their eyes ſmall and ſunk, their cheeks prominent, their noſe flat, their hair black, they have ſcarcely any beard, and their complexion is a little tawny. The complexion and features of the women are very nearly the ſame; from this repreſentation, it will be ſuppoſed they are not very ſeducing objects.

157 578 476 The character of the Kamtſchadales is mild and hoſpitable; they are neither knaves, nor robbers; they have indeed ſo little penetration, that nothing is more eaſy than to deceive them, as we have ſeen in the advantage that is taken of their propenſity to intoxication. They live together in the utmoſt harmony, and the more ſo, it would ſeem, on account of the ſmallneſs of their number. This unanimity diſpoſes them to aſſiſt one another in their labours,

7:Lesseps T-3 (1787-88)1790 Kamchadal

476 bours, which is no ſmall proof of their zeal
157 to oblige, if we conſider the natural and ex-
461 treme ſlothfulneſs of their diſpoſition. An
515 active life would be inſupportable to them; and the greateſt happineſs, in their eſtimation, next to that of getting drunk, is to have nothing to do, and to live for ever in tranquil indolence. This is carried ſo far with theſe people, as frequently to make them neglect the means of providing the indiſpenſable neceſſaries of life; and whole families are often reduced to all the ſeverities of famine, becauſe they would not take the pains of providing in ſummer a reſerve of fiſh, without which they are unable to live. If they neglect in this manner the preſervation of their exiſtence, it is not to be ſuppoſed that they are more attentive to the article of cleanlineſs; it diſplays itſelf neither in their perſons, nor their habitations; and they may juſtly be reproached for being addicted to the contrary

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

133 very ſteep. The paſſage is troubleſome even in the calmeſt weather,
487 for the road falling off leaves nothing but ice: the *Kamtſchadales*,
481 therefore, in order to paſs it in ſafety, have under their ſnow-ſhoes, two nails; yet theſe are of ſmall ſervice if the wind overtakes them there, for they are frequently carried from one ſide to the other to the great hazard of their lives, or at leaſt of their limbs. Beſides which, this paſſage is attended with the danger of being ſmothered in the ſnow, the narrow path lying between high, and almoſt perpendicular, mountains, from which the ſnow falls in heaps upon the leaſt motion. This is a danger, indeed, unavoidable in every place where the road lies in narrow and deep vallies.

In mounting the ridge all muſt walk, for the dogs can hardly aſcend it even with the light baggage; but in deſcending it is otherwiſe, for then they only leave a ſingle dog in the ſledge: the reſt are taken out, it being impoſſible to manage them all in ſuch a road. Although this paſſage of the ridge be ſo difficult, yet, as it is the uſual road to *Kamtſchatka*, one may conclude that any other paſſage from ſea to ſea muſt be ſtill more difficult and dangerous.

133 The coaſt from the mouth of the Great River to the river *Puſtaia*, as far as the *Shaback*, is ooze and ſoft mud, ſo that many veſſels have been thrown upon it without receiving any hurt. From the *Shaback* the ſhore begins to be bolder, though not rocky; but from the *Tulaban* river it is mountainous, rocky, and dangerous to ſeamen.

600 The late deſcriptions of the ſhore of the *Penſchinska* ſea, from the *Leſnaya* to the *Penſchina* and to the *Ochotska*, are more particular than the former: for in the year 1741 a high road was eſtabliſhed to *Kamtſchatka* with poſt-houſes at proper ſtations; yet, with regard to the diſtances of places, they are not much more accurate; ſince there were no aſtronomical obſer-

vations

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon ſliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodouſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 'till 491 484

When they march on foot it is remarkable that two never go a-breast, but follow one another in the same path, which by use becomes very deep and narrow; so that it is almost impossible for one that is not used to it to walk therein, for these people always set one foot strait before the other in walking.[1] 481

[Chapters XI-XIV of this source are a summary (and a distorted one) rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2]

CHAP. XI.

The Opinions of the Kamtschadales *concerning* God, *the Formation of the World, and other Articles of Religion.* 776

THE *Kamtschadales*, like other barbarous nations, have no notions of a deity, but what are absurd, ridiculous, and shocking to a humanized mind. They call their god *Kutchu*, but they pay him no religious worship, and the only use they make of his name is to divert themselves with it; they relate such scandalous stories of him as one would be ashamed to repeat. Amongst other things they reproach him with having made so many steep hills, so many small and rapid rivers, so much rain, and so many storms; and in all the troubles that happen to them upbraid and blaspheme him.

They place a pillar upon a large wide plain, which they bind round with rags. Whenever they pass this pillar they throw a piece of fish or some other victuals to it; and near it they never gather any berries, or kill any beasts or birds. This offering they think preserves their lives, which otherwise would be shortened: however, they offer nothing which can be of use to themselves, but only the fins and tails of the fish, or such things as they would be obliged to throw away. In this all these people of *Asia* agree, offering only such things as are useless to themselves. 778 782 886

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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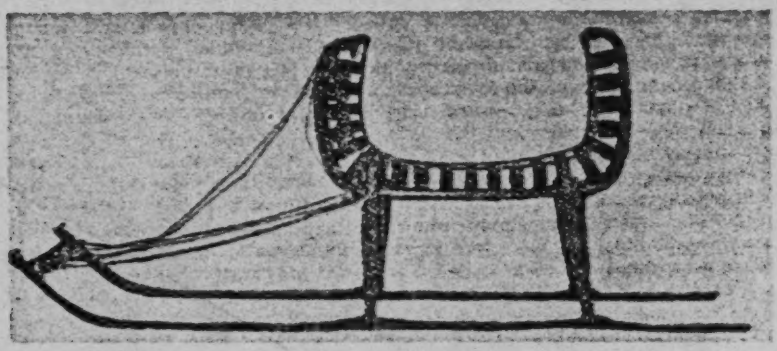

18th-century dogsled.

105

[222] [462] handle. Later the horn was replaced by an iron tip. Gathering plants was women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic technology. "The former Kamchatka metals, almost until the coming of the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[321] [324] [372] [252]

The only domesticated animal of the Itel'mens was the dog. Later, harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[231] [77] [493] [481] [501] [461]

The Russians called the Itel'men villages in the 18th century ostrozhkas, or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set on high platforms resting on piles. The ancient dress of the Itel'mens resembled Koryak and Chukchi dress.

[361] [342] [291] [171]

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

7: Lesseps T-3 (1787-88) 1790 Kamchadal

peared full of holes like a ſieve. The ſnow was frequently ſo deep in the woods, that it was impoſſible to proceed a ſtep without ſinking in; our reſource in that caſe was to quit our ſledges, which were no longer ſerviceable to us, and turn them upon their ſide. Having taking this precaution, which was ſufficient to retain our dogs, who immediately laid themſelves down in a circular form upon the ſnow, and patiently waited the return of their guides; we faſtened to the ſoles of our feet, with leathern thongs, rackets, made of thin board *, ſix or eight inches wide and four feet long, the front of which turned up like ſkates, and the bot-

481

froſt being later, and guſts of wind continuing almoſt without ceſſation, the ſledges could not conveniently be uſed till a conſiderable time after, as will be ſeen in the ſequel.

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* Theſe rackets are called *ligi*. In the northern part of the peninſula they uſe another ſort of racket, called *lapki*, which are ſhorter, and made of leathern thorns twiſted, like the ſtrings of a tennis racket; two ſmall ſharp pointed bones are fixed in the bottom, which penetrate the ice, and are a preſervative againſt ſliding.

tom

7:Lesseps T-3 (1787-88)1790 Kamchadal

481 tom was covered with the ſkin of the ſea wolf or rein deer. Furniſhed with theſe kind of
000ſhoes, we continued our chace; I had at firſt ſome difficulty to accuſtom myſelf to them, and I fell more than once both upon my back and my face; but the pleaſure of a good chace made me ſoon forget theſe accidents. Though it was difficult to perceive the hares and partridges, whoſe whiteneſs equalled that of the ſnow, I did not fail, after a little practice, and ſome inſtructions from my companions, to bring home a tolerable number.

This was one of my moſt agreeable diverſions while at Bolcheretſk; the reſt of my hours were occupied in expreſſing my impatience and uneaſineſs, on account of the length of time I was obliged to ſtay there. To give a different turn to my thoughts, I embraced the few fine days that we experienced, to viſit ſome of the environs, which

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon fliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodovſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 'till 491 484

484/491 till he comes to ſome dwelling-houſe. This is very laborious, but it happens ſo often, that no guide ever ſets out without his ſnow-ſhoes.

484 The greateſt danger is when a ſtorm of driven ſnow ſurpriſes them; then they are obliged with all haſte to ſeek the ſhelter of ſome wood, where they ſtay as long as the tempeſt laſts, which ſometimes is a whole week. If a ſtorm at any time ſurpriſes a large company of travellers, they dig a place for themſelves under the ſnow, and cover the entry with wood or bramble. The *Kamtſchadales* ſeldom make theſe temporary huts, but hide themſelves commonly in caves or holes of the earth, wrapping themſelves in their furrs; and when thus covered, they move or turn themſelves with the greateſt caution, leaſt they ſhould throw off the ſnow, for under that they lie as warm as in their common huts: they muſt only have the convenience of a breathing place; but if their cloaths are tight or hard girt about them, the cold is unſufferable.

If the ſtorms ſurpriſe them in an open country where there is no wood, they endeavour to find ſome hollow place, in which they ſhelter themſelves, but muſt be careful to prevent being ſmothered with the ſnow. The eaſt and ſouth-eaſt winds are generally attended with a moiſt ſnow, which wets the travellers; and being followed with the north wind and ſevere colds, ſeveral are then frozen to death.

Another danger attending the traveller is, that in the ſevereſt froſt ſeveral rivers are not quite frozen over; and as the roads for the moſt part lie cloſe upon the rivers, the banks being very ſteep, few years paſs in which many people are not drowned. A diſagreeable circumſtance alſo to thoſe who travel in theſe parts is their ſometimes being obliged to paſs through copſes, where they run the riſk of having their eyes ſcratched out, or their limbs broken; for the dogs always run moſt violently in the

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

the worst roads, and to free themselves very often overturn 484
their driver.

The best travelling is in the month of *March* or *April*, when 484
the snow is turned hard or frozen a little at top; however, there 147
is still this inconvenience attending it, that sometimes travellers are obliged to lodge two or three nights in desert places; and it is difficult to prevail upon the *Kamtschadales* to make fire either for warming themselves or dressing victuals, as they and their dogs eat dried fish, and find themselves so warm wrapt in their furrs that they want none; nay, it is surprising to see all the 513
people of this climate bearing the cold so well, that after having 147
slept a whole night very sound they awake next morning as refreshed and alert as if they had lain in the warmest bed. This seems to be so natural to all here, that I have seen some of them lie down with their backs uncovered against a fire, and notwithstanding the fire has been burnt out long before morning, yet they continued to sleep on very comfortably, and without any inconvenience.

CHAP. X.

Of the Kamtschadales' *Method of making* WAR. 721

ALTHOUGH before they were conquered by the *Russians*, the *Kamtschadales* did not seem to have had any ambition of increasing their power, or enlarging their territories, yet they had such frequent quarrels among themselves that seldom a year passed without one village or other being entirely ruined. The end of their wars was to take prisoners, in order

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

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Losing sight of the range near Melcova no more mountains are seen, and Mashura, a village of fourteen houses and eighty-eight inhabitants, has but little to recommend it in the way of scenery. Excepting at the settlements no boat is ever met with, and voyaging on the Kamschatka is regarded by the natives as an affair of some moment. Our approach was accordingly heralded by numerous discharges of blank cartridge from the guns of our raftmen, and as we stepped ashore shortly after sunset we found the head-man awaiting us, together with a considerable proportion of the inhabitants. Anxious to prevent a "ring" between them and the men we had brought from Melcova, we approached the subject of canoes for our further journey as quickly as we could. But we had been anticipated, and we began to see that henceforward extortion was to be the order of the day in every case in which we were brought in contact with these people. They refused to sell us canoes, and demanded sixty roubles to take us on a distance of as many versts, —a rate which would have left us with empty pockets before we had got half way down the river. For a small birch-bark jar of milk they asked half a rouble, and charged in like proportion for other articles. In these cases, however, our line of action was simple. We took the things at once, placed them inside the tents, and paid what we considered the proper sum. They refused the money, and when we turned in for the night without having come to any definite settlement for the following day, the relations between us had become considerably strained.

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Mashura was, in bygone days, one of the largest Kamschatdale settlements in the centre of the peninsula, but smallpox—the disease so fatal on its first introduction among uncivilised nations—broke out in 1767, and ravaged the country to such a frightful extent that it is said to have killed nearly three-quarters of the natives, and the village has since dwindled down to its present insignificant size. The people were short, but strong-looking men, with scanty beards and straight hair, which was either light or dark, according to the preponderance of Russian or native blood. Most

000 that we could no longer continue our journey. Everything is comparative; and to our craft, with its low free-board and heavy load, the three-inch waves became more formidable than the heavy seas in a gale in "the Bay" appear to an ocean steamer. It would have been too absurd to founder in such a tea-cup storm, so we made for the shore, and set to work to cut down trees till we had to some extent restored the circulation in our limbs. An hour or two later the wind dropped, and we were able to proceed. We noticed the signs of some old forest fires near this spot, but they seem, happily, to be very rare. In Scandinavia, in a journey of the length that ours had been, we should have seen fifty or more. Here the great precautions that are taken against their occurrence are no doubt the chief reasons for their infrequency. Our hunters told us that the sables do not return to these spots for many years after, even if the forest has been but slightly injured by the fire.

361 Late in the afternoon we passed the hamlet of Kristovsky, or
133 Kristi as it was called by our men, and a few versts farther came
484 upon some people encamped upon the banks. It is curious how little the rivers are used as highways either during the winter or summer. The natives can hardly be said to travel at all, excepting in their winter excursions after sable. This was only the second party we had seen away from the settlements, and we were told that no one had passed down the river from Melcova that year. We shouted greeting as we passed, but there was no time to stop, as we wished to reach Kluchi that night. Our Kojerevsky men worked their paddles with a will, and before long we reached the mouth of the Yelofka River, a large stream, eighty yards or more in width, which joins the Kamschatka on its left bank. It flows due south, draining the western slopes of the great Sevelitch volcano, and is used as a road to Tigil, a settlement on the river of that name in the north-west part of the peninsula, which is, or used to be, a trading station of some importance to which the Koriaks
133 and Tchukchis bring in their furs for sale. The river is ascended by canoes for fifty or sixty miles, the watershed is then crossed by

27: Sauer--301-302 T-2 (1789-93) 1802 Kamchadal
116, 133, 484

"With regard to rivers, the Kamtshatka is the only one of any consequence. Its source I have already described: it flows nearly north to Neizshni Kamtshatka, where it turns to the east south-east about 25 miles, and empties itself into a large but shallow bay formed by the Kronotskoi and Kamtshatskoi promontories; its discharge is extremely shallow, not exceeding eight feet at high water, and the breakers are very violent with an easterly breeze. This, however, is the only navigable river on the peninsula.

The Bolshoia Reka has only a course of 20 miles. It is formed by the union of the Bystrea with the Natsheke, a little below Bolshoiretsk: the former has its rise from the springs near the source of the Kamtshatka, and takes a sweep from south to west; the latter commences a little south of the village Natsheke, and flows nearly west about 100 versts: neither are navigable, though, during the springflood, the natives sometimes venture down them in their canoes, but with great difficulty, owing to rapids, &c.

The Avatsha has also an interrupted and unnavigable course of 70 versts in a direction east south-east. The inhabitants of the [302] village Koriatsk, 20 miles up this river from its discharge, pass up and down it in their canoes, hauling them over the flats."

27: Sauer--302 T-2 (1789-93) 1802 Kamchadal
116, 133, 224, 484

"The Ilmitsh, commonly called the Paratounca, has its rise from near the Viluitshiskoi Sopka (called in Cook's last voyage the Paratounca); and from a lake near the Tareinskoi harbour, it makes a circuit of 85 versts, and discharges itself into the bay of Avatsha, only three miles in a direct line from its source: it is navigable for boats all the way; but I was fourteen hours in traversing the whole of this river, from the lake, in a canoe. The villagers of Paratounca go on the chase of deer, argali, bears, &c. about the source of this river, by passing down the stream into Tareinski harbour, and hauling their canoes over the plain already mentioned into the lake. An immense number of rivulets from the mountains flow to the east into the ocean, but none of them are either remarkable, or have their banks inhabited."

Ainu AB6
Kamchadal RY3

K 175 131 167 A 175

/127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

A K 174 103 192

2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101]

Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

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/127 cont./

with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

491 From the river *Nalacheva* they in ſix days arrive at the upper fort.

Third road from the *Bolſcheretskoi* fort, by the Rapid River.

	verſts	fathoms
From the *Bolſcheretskoi* fort, up along the Great River, to the *Opachin* ſmall fort ——	44	0
From thence to the upper ford ——	33	0
From thence to the ſettlement of *Ahanichevo*	22	0
From thence to the ſettlement of *Ganaline*	33	0
From thence to the head of the *Kamtſchatka*	41	0
From thence to the upper *Kamtſchatkoi* fort	69	0
In all from the *Bolſcheretskoi* to the upper *Kamtſchatkoi* fort —— ——	242	0

485 In all the places expreſſed in the tables the travellers take up lodgings at night, except where the diſtance is only five or ſix verſts. Notwithſtanding the great diſtance between the *Obluko-minſkoy* and the upper *Kamtſchatkoi* fort, in good weather they travel it in three days, lying two nights in deſert places.

487 491 There are other roads from the *Bolſcheretskoi* to the upper fort, both from the *Penſchinſka* ſea and from the Eaſtern; for every river there that falls into either of thoſe ſeas has a paſſage to *Kamtſchatka:* but, as nobody except the *Kamtſchadales*, and ſometimes the Coſſacks, in great neceſſity, travel them, it was not thought material to deſcribe them; nor can one well aſcertain the diſtances by their journeys.

They go from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort, either through the upper *Kamtſchatkoi* fort, or by the coaſt of the Eaſtern Sea. From the upper *Kamtſchatkoi* fort the way is along the river *Kamtſchatka*, except where the river makes great windings.

windings. The diſtance from the upper to the lower *Kamtſchatkoi* fort is laid down in the following table. 491

	verſts	fathoms
From the upper *Kamtſchatkoi* fort to the river *Keergena* —	24	0
From thence to the ſmall fort *Maſhurin*	32	0
From thence to the ſmall fort *Nachikin* —	87	0
From thence to *Golka* —	33	0
From thence to the ſmall fort *Talecheva*	26	0
From thence to the *Uſhky* —	16	0
From thence to the *Krewky* —	25	0
From thence to the *Kreſtee* —	25	0
From thence to the *Gorboon* —	26	250
From thence to the *Harchin* —	11	0
From thence to the *Camenoy* ſmall fort	27	0
From thence to the *Cavanackey* —	16	0
From thence to the *Kamack* —	6	0
From thence to the *Hapick* —	8	250
From thence to the *Schockey* —	9	0
From thence to the *Obooboffs* ſettlement	17	250
From thence to the lower *Kamtſchatkoi* fort, to the church of St. *Nicholas*, —	7	250
In all from the upper to the lower fort —	397	0
And from the *Bolſcheretskoi* —	833	50
	1230	50

The other road from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort being meaſured only to the *Nalacheva* fort, it cannot exactly be known which is the neareſt way; but one may imagine that there is not much difference between them. 485 491

The

485 The chief places on that road where they usually lodge at night are the small forts of *Opachin*, *Nachiekiok*, and the *Tarein*; the haven of *Peter* and *Paul*, which was formerly called the small fort *Austin*; the *Ostrovenaya* river, *Supanova*, and the *Chazma*; upon all which rivers there are *Kamtschatkoi* habitations.

487 From the *Chazma* to the river *Kamtschatka* the road lies over
491 desolate mountains; and they come upon the river just by the village *Oboobosts*, seven versts and a half above the lower *Kamtschatkoi* fort, lodging but one night in a desert place.

From the lower *Kamtschatkoi* fort to the northern parts two roads are made, the one is by the *Elouki*, to its head; and from thence over a ridge to the head of the river *Tegbil*, along which they go quite to the sea; and from thence, not far off from the sea, to the rivers *Lesnaya* and *Podkargirnaya*.

In a moderate way of travelling, when there is no hindrance from bad weather, they go from the lower *Kamtschatkoi* fort to the lower *Tegbilskoy* small fort, called *Shipin*, in 10 days.

By the second road they may travel in the same manner to the river *Karaga* in ten days, whose head is near the river *Lesnaya*.

From the upper *Kamtschatkoi* fort to the *Tegbil* the common road is by the river *Elouki*: first, over the ridge to *Oblukominskoy* fort, and from thence north by the *Penschinsky* sea; and another road is by the river *Krestovaya* to the *Harboosova*.

By the first road they may reach *Tegbil* in 10 days; but they very often lodge the tenth night on the road, not so much on account of the distance as the badness of the roads, and the very mountainous places over the *Utkolotskoy* cape. The second road requires 11 or 12 days.

The passage along the *Elouki* to the *Tegbil* is the longest of all, for that requires above 14 days' journey.

From the *Bolscheretskoi* fort southward to the *Kurilskaya Lopatka* the usual passage is nine days. The distance from the

Bolscheretskoi

called *Stanovoy* ridge, we come to the river *Geek*, called by the /103
Coſſacks *Vorovſkaya*, or Rogue's River, becauſe the *Kamtſchadales* /133
who live upon it were frequently concerned in inſurrections, and uſed to kill the tax-gatherers treacherouſly. From hence we meet nothing worth notice 'till we come to a *Kamtſchatkoi* fort, called *Tackauta*, in which travellers uſually equip themſelves for paſſing the ridge. Here the common road lies near a rivulet, from the head of which it paſſes the *Stanovoy* ridge, 'till it deſcends to the heads of the river *Keergena*, which falls into the *Kamtſchatka*.

From the *Keergena* we paſs up the river *Kamtſchatka* to the /133
Kamtſchatkoi fort. The country between the little fort *Tackauta* and the *Stanovoy* ridge is a deſert of 110 verſts in extent, and from the ridge to the upper *Kamtſchatkoi* fort is 65, the land equally barren.

The above road is very difficult and dangerous, for a great part /133
of it lies on the river, which, from the rapidity of its current, in 487
many places never freezes. Travellers are obliged, therefore, in ſome parts to keep cloſe to the ſides with great care; for if the ice breaks nothing can ſave them, the rocks on the banks in ſeveral places being ſo ſteep that it is impoſſible to get on ſhore, and the river runs ſo ſwiftly that you are immediately driven under the ice. The ridge is paſſable only in calm and fair weather, for which we are obliged to wait ſometimes ten days or more; at other times it is impoſſible to find the way, and we muſt inevitably fall down the precipices, and be loſt. The propereſt time to paſs is when no clouds are to be ſeen on the top of the ridge, for even the leaſt cloud is a ſign of a great ſtorm there. To croſs over this ridge takes up a whole winter's day. The greateſt danger is in paſſing over the very top, which is called by the Coſſacks, *Greben*, or a comb. Its breadth is 30 fathoms; it is like a boat with the bottom upwards, the aſcent on both ſides being very

133 very ſteep. The paſſage is troubleſome even in the calmeſt weather,
487 for the road falling off leaves nothing but ice: the *Kamtſchadales*,
481 therefore, in order to paſs it in ſafety, have under their ſnow-ſhoes, two nails; yet theſe are of ſmall ſervice if the wind overtakes them there, for they are frequently carried from one ſide to the other to the great hazard of their lives, or at leaſt of their limbs. Beſides which, this paſſage is attended with the danger of being ſmothered in the ſnow, the narrow path lying between high, and almoſt perpendicular, mountains, from which the ſnow falls in heaps upon the leaſt motion. This is a danger, indeed, unavoidable in every place where the road lies in narrow and deep vallies.

In mounting the ridge all muſt walk, for the dogs can hardly aſcend it even with the light baggage; but in deſcending it is otherwiſe, for then they only leave a ſingle dog in the ſledge: the reſt are taken out, it being impoſſible to manage them all in ſuch a road. Although this paſſage of the ridge be ſo difficult, yet, as it is the uſual road to *Kamtſchatka*, one may conclude that any other paſſage from ſea to ſea muſt be ſtill more difficult and dangerous.

133 The coaſt from the mouth of the Great River to the river *Puſtaia*, as far as the *Shaback*, is ooze and ſoft mud, ſo that many veſſels have been thrown upon it without receiving any hurt. From the *Shaback* the ſhore begins to be bolder, though not rocky; but from the *Tulaban* river it is mountainous, rocky, and dangerous to ſeamen.

000 The late deſcriptions of the ſhore of the *Penſchinska* ſea, from the *Leſnaya* to the *Penſchina* and to the *Ochotska*, are more particular than the former: for in the year 1741 a high road was eſtabliſhed to *Kamtſchatka* with poſt-houſes at proper ſtations; yet, with regard to the diſtances of places, they are not much more accurate; ſince there were no aſtronomical obſer-

vations

000 Having described all the coast and principal rivers on the continent, we shall now proceed to describe the principal roads through this country.

CHAP. II.

Of the ROADS *in* KAMTSCHATKA.

487 491 FROM the *Bolscheretskoi* to the upper *Kamtschatkoi* fort are three principal roads: the first, along the *Penschinsky* sea; the second, by the Eastern Sea; and the third, by the *Bistroy*.

By the first they go up the river *Oblukomina* to the ridge *Oblukominskoy*, and over the ridge to the river *Keerganick*, along which almost to the river *Kamtschatka*, and from thence up the river to the upper *Kamtschatkoi* fort.

By the second they go from the *Bolscheretskoi* up the Great River to the *Nachikin* fort, and cross a small ridge to the river *Awatscha*, to the haven of *Petropaulauskay*, or of *Peter* and *Paul*; and from thence along the coast of the Eastern Sea north to the river *Shupanova*, and up that river to its head; from whence over the ridge to the river *Poweecha*, and down the mouth of that river, which is over-against the upper fort.

The third road lies from the *Bolscheretskoi* up the Great River to the *Opachin* fort; from thence through plains to the Rapid River, up to its head; and thence, down the river *Kamtschatka*, to the upper *Kamtschatkoi* fort.

They travel the two first roads chiefly in winter; the third, on foot in summer. The first and the last roads are measured, but the second is only measured half way; and the particular distances are here adjoined.

First

491 From the river *Nalacheva* they in ſix days arrive at the upper fort.

Third road from the *Bolſcheretskoi* fort, by the Rapid River.

	verſts	fathoms
From the *Bolſcheretskoi* fort, up along the Great River, to the *Opachin* ſmall fort ——	44	0
From thence to the upper ford ——	33	0
From thence to the ſettlement of *Abanichevo*	22	0
From thence to the ſettlement of *Ganaline*	33	0
From thence to the head of the *Kamtſchatka*	41	0
From thence to the upper *Kamtſchatkoi* fort	69	0
In all from the *Bolſcheretskoi* to the upper *Kamtſchatkoi* fort —— ——	242	0

485 In all the places expreſſed in the tables the travellers take up lodgings at night, except where the diſtance is only five or ſix verſts. Notwithſtanding the great diſtance between the *Obluko-minſkoy* and the upper *Kamtſchatkoi* fort, in good weather they travel it in three days, lying two nights in deſert places.

487 There are other roads from the *Bolſcheretskoi* to the upper fort, 491 both from the *Penſchinſka* ſea and from the Eaſtern; for every river there that falls into either of thoſe ſeas has a paſſage to *Kamtſchatka:* but, as nobody except the *Kamtſchadales*, and ſometimes the Coſſacks, in great neceſſity, travel them, it was not thought material to deſcribe them; nor can one well aſcertain the diſtances by their journeys.

They go from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort, either through the upper *Kamtſchatkoi* fort, or by the coaſt of the Eaſtern Sea. From the upper *Kamtſchatkoi* fort the way is along the river *Kamtſchatka*, except where the river makes great windings.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

485 The chief places on that road where they usually lodge at night are the small forts of *Opachin*, *Nachiekiek*, and the *Tarein*; the haven of *Peter* and *Paul*, which was formerly called the small fort *Austin*; the *Ostrovenaya* river, *Supanova*, and the *Chazma*; upon all which rivers there are *Kamtschatkoi* habitations.

487 491 From the *Chazma* to the river *Kamtschatka* the road lies over desolate mountains; and they come upon the river just by the village *Oboobosts*, seven versts and a half above the lower *Kamtschatkoi* fort, lodging but one night in a desert place.

From the lower *Kamtschatkoi* fort to the northern parts two roads are made, the one is by the *Elouki*, to its head; and from thence over a ridge to the head of the river *Tegbil*, along which they go quite to the sea; and from thence, not far off from the sea, to the rivers *Lesnaya* and *Podkargirnaya*.

In a moderate way of travelling, when there is no hindrance from bad weather, they go from the lower *Kamtschatkoi* fort to the lower *Tegbilskoy* small fort, called *Shipin*, in 10 days.

By the second road they may travel in the same manner to the river *Karaga* in ten days, whose head is near the river *Lesnaya*.

From the upper *Kamtschatkoi* fort to the *Tegbil* the common road is by the river *Elouki*: first, over the ridge to *Oblukominskoy* fort, and from thence north by the *Penschinsky* sea; and another road is by the river *Krestovaya* to the *Harboosova*.

By the first road they may reach *Tegbil* in 10 days; but they very often lodge the tenth night on the road, not so much on account of the distance as the badness of the roads, and the very mountainous places over the *Utkolotskoy* cape. The second road requires 11 or 12 days.

The passage along the *Elouki* to the *Tegbil* is the longest of all, for that requires above 14 days' journey.

From the *Bolscheretskoi* fort southward to the *Kurilskaya Lopatka* the usual passage is nine days. The distance from the

Bolscheretskoi

491 *Bolſcheretskoi* fort to the *Kurilskaya Lopatka* is 210 verſts 300
487 fathoms, which ſpace may be eaſily travelled, even in four days; but the Coſſacks of thoſe places have a cuſtom of ſtopping at any ſmall fort, under pretence of ſome buſineſs there, though their moſt probable motive is to refreſh their dogs. At a middling rate I have travelled in three days from the *Kamtſchatkoi* to the *Bolſcheretskoi*, which is near 150 verſts.

	verſts	fathoms
From the *Bolſcheretskoi* fort to the mouth of the Great River — — —	33	0
From the mouth, along the ſea-ſhore, to the river *Opala* — —	85	0
From thence to the *Koſhubochiek* —	18	0
From thence to the *Yavina* —	15	0
From thence to the river *Ozernaya* —	15	0
From thence to the *Kambalina* —	36	300
From thence to the *Lopatka* —	27	0
In all from the *Bolſcheretskoi* to the *Kurilskaya Lopatka* — —	210	300

CHAP. III.

Of the KURILSKI ISLANDS.

108 UNDER the name of *Kurilski* iſlands are underſtood all
131 thoſe iſlands which extend from the *Kurilskaya Lopatka*, or the ſouthern end of *Kamtſchatka*, in a row ſouth-weſt quite to *Japan*. They derive their names from the inhabitants of thoſe iſlands which lie neareſt to *Kamtſchatka*, who are called by the

22: Guillemard T-2 (1882) 1886 Kamchadal

492 convenient in this kind of travelling is avoided. A thick layer of bearskin was placed over the saddle-cloth, and effectually prevented sore backs. Our personal gear, enclosed in bags made from the skin of the hair-seal, was easily adjusted, but the photographic apparatus and other breakable objects required more care and time,
133 and it was noon before we were fairly off. We bade adieu to our
487 friends, and passed out through the narrow gap at the back of the village towards a small lake of brackish water which hems it in to the north. Here at one time stood the hospital mentioned in Captain Cook's "Voyages," but no trace of the building now remains. Circumventing the lake, we struck off to the north-west and, before long, the track, which had never been very well marked, became obliterated. Our path led through a rough but picturesque country, dotted here and there with stunted birches, and we steered across it for a certain point in the landscape recognised by our guides. By our side trotted one of the most ornamental members of the expedition, whom I have hitherto neglected to introduce—Verglaski, a magnificent bear-dog belonging to Jacof, of an aspect almost as solemn as his master. Our horses had hitherto gone fairly well, but during a short halt that we made to adjust some of the packs a stampede occurred, and in an instant the scene was changed to one of the wildest confusion. Kicking, plunging, colliding against trees, and dashing wildly in all directions, it was not long before the horses succeeded in disembarrassing themselves of their loads, and the ground presented the appearance of having been recently passed by a beaten army in full retreat. The horseboys, more than half drunk, pursued the fugitives, cursing volubly in Russian and Kamschatdale; while we, to whom these little unpleasantnesses of packhorse travel had not even the merit of novelty, lit our pipes resignedly and proceeded to gather up the fragments. It was a full hour ere we were again *en route*. These incidents, "tedious as a twice-told tale," and trying alike to the temper and the baggage, recurred again and again. We progressed, as it were, by a series of stampedes, and our horseboys became almost as erratic in their locomotion as their charges.
[of Petropavlovsk--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

136 Avatcha River, and forty versts from Petropaulovsky. We passed
137 through the same monotonous forests of birch as before, which, like
487 those of other northern countries, seemed singularly devoid of animal life. An occasional coal tit, which from its note and habits appeared identical with the tame little freebooter of our own gardens, or the tapping of a woodpecker,[1] alone broke the almost death-like stillness which reigned around. We had struck a well-marked trail, and progressed in Indian file, the packhorses (tied in fours, each to the tail of the one in front) leading the way, and relieving the monotony by an occasional breakdown or a stampede.
231 Almost all these ponies are strong and well shaped, but from the ill-treatment they receive at the hands of their masters, have learned to bite, kick, and shy on all occasions, together with other accomplishments of like nature which were somewhat apt to dis-
000 turb our equilibrium. There was but one saddle among us, and the "Kamschatkan Peats," as we named the combination of pillow and pack-saddle which we used as a substitute, though comfortable enough when we ambled along quietly, were apt to become slightly insecure when, as a naval member of our party expressed it, we "made bad weather."

The path between Stari-ostrog and Petropaulovsky appears to be tolerably well-travelled, to judge from the frequency with which we came across the marks of old camping-grounds, but we met with no one on our way. It was afternoon when we reached the river, and crossing a small affluent, found ourselves opposite the village. We had ridden on ahead, and were hailing the natives for canoes in which to cross, when a tremendous clattering in our rear caused us to turn, and we beheld the cook's horse advancing in full stampede, but minus his rider. Beneath his belly a large canteen swung violently from side to side, half-open, and discharging a shower of tin cups, knives, forks, plates, tea and coffee kettles, and other articles of like nature in all directions. We retraced our steps sadly, picking up such articles as we could find, but

[1] *Picus tridactylus*, considered as a distinct species (*P. albidior*) by Dr. Stejneger.

22: Guillemard T-2 (1882) 1886 Kamchadal

435 price, but this animal does not exist in any numbers in the peninsula. The most valuable skin of all is that of the sea-otter (*Enhydra lutris*), which is becoming rarer year by year. A good pelt of this animal will bring even the native hunter as much as a hundred roubles, while in the European market a perfect one has been known to realise £120!

133 137 On the morning of August 22d we came for the first time to a *tûndra* of considerable size. After the gloom of the birch-forest these vast stretches of level ground have a most exhilarating effect. The feeling of oppressive stillness which but an hour or two before seemed to weigh upon us like a nightmare, disappeared as if by magic, and pushing our horses into an easy canter, we pursued our way with a sense of freedom that is rarely or never felt except by those who ride where fancy leads them over the level surface of an uncultivated plain. The melancholy, the *niedergeschlagenheit* of Kamschatka, of which Kittlitz gives such a long description in his account of the country, I confess I never felt: the converse—a purely physical feeling of delight in mere existence—we often experienced, and a good rollicking drinking song and a loose rein seemed a necessity in order to let off our stock of superabundant spirits. Long wastes of almost orange-coloured grass stretched away nearly to the horizon, only broken here and there by a still pool, or flecked by little tufts of snowy cotton-grass. Our 132 487 course—for we were on what a native would doubtless call the "high road" to Narchiki—was marked out by long poles, some fifteen or twenty feet in height, which in winter serve to guide the traveller over the dreary wastes of snow. In the forest another method is adopted. The trees are "blazed" by a vertical slit cut in the bark by the hunter's axe. This gapes with the growth of the tree and forms a conspicuous oval mark, ten or twelve feet above the ground—a height which forcibly impresses upon the mind the depth of the winter snow. Other evidences which told us that the warm sun beneath which we were travelling was an affair of days, not weeks, were close at hand, for the snow lay in thick patches

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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reverend pedlers, for every body here is a merchant. I made them happy by a pound of tea, a few pounds of tobacco, and a bottle of spirits. The road was very fine and the weather had much increased in cold, so much so, that the thermometer stood at 25°, which I had never before seen in Kamtchatka above 18°. Thence to Morososhna, thirty miles of a good road. The last named village may be termed large, containing eighteen dwellings and a hundred inhabitants, in the enjoyment of many luxuries, yet without cattle. Thence the road lay along the foot of the mountains, the scenery of which gives a relief to the eye as it is in general uninteresting all the way to Bolcheretzk, except at a few places. Upon the road to Belagolofsk ostrog, thirty-five miles, I got twice upset into the river without the means of drying or changing my clothes, and suffered much, in consequence, in my feet. I had a fine view of the magnificent Ichinskaya Sopka or mountain, which continued visible until I reached Khariuzova forty miles, the road to which is in general good, though there are some parts dangerous in the night time. The ice from the rapidity of the current, frequently sunk under us, but from our velocity of movement no accident happened.

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At midnight I continued on for Kovranskoy ostrog, twenty-two miles. There is here a law obliging the Toions to have a path made within twenty-four hours after every snow storm. Our chief had failed in his duty in this particular, and conse-

29:Cochrane T-2(1821-22)1824 Kamchadal

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quently was obliged to go before upon his snow shoes; and such was his diligence from fear of reprehension, that he not only arrived before me, but arrived in five hours, a very short time to accomplish such a journey upon snow shoes. I found it the most miserable place I had seen for a long period, reminding me of Zashiversk in northern Siberia. The brows of the hills are covered with brush wood, with little other appearance of nature.

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From hence to Uskolofskoy ostrog are thirty-five miles, which I was obliged to do by walking and alternately driving a narte, and cannot say which of the two is the most fatiguing. The diseases prevalent in the place prevented almost any assistance being rendered us. There are no cattle, yet fine meadow lands. Fish and game are abundant. At this place I met with another old shipmate in the person of the brandy contractor, who accompanied me to the next station, Napanas, a village with six dwellings and forty people. The road leading to it is considered dangerous, owing to a large toondra or swampy desert which must be crossed; the distance is forty miles. We passed the desert in a slight fall of snow, which had not been sufficient to obliterate the marks of the track, else we must have been compelled to halt whenever the snow overtook us. I did not arrive until two o'clock in the morning, having been previously hurled down a snowy declivity of one hundred feet in depth: at the bottom of which, I, guide, dogs and narte all lay huddled together; however vexed I felt inclined to

awe and keep in ſubjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtſchatka* on the left ſide, and its head meets that of the *Tegbil.*

The *Tegbil* runs almoſt in the ſame latitude with the *Kamtſchatka*; and the ſtrait road from the one to the other is by the river *Elouki*. Some little forts and ſettlements of the natives are ſcattered here and there upon its banks.

The *Bolſchaia-reka*, or Great River, called by the natives *Keekſka*, runs out of a lake 185 verſts to the eaſt from its mouth, and falls into the *Penſchinſka* ſea in the latitude of 52° 45′. Its mouth is reckoned to be 555 verſts to the ſouth diſtant from that of the *Tegbil*. It is called Great upon this account, that of all the rivers that fall into the *Penſchinſka* ſea this is the only one which they can navigate from its mouth nearly to its ſpring, and this not without ſome difficulty, on account of its rapidity and the great number of iſlands. At the time of high water it is ſo deep at the mouth that large veſſels may enter; for the water has been obſerved to riſe at full and new moon very little leſs than nine *Paris* feet or four *Ruſſian* yards. It receives a multitude of rivulets; the moſt conſiderable of which is the *Biſtroy* or Rapid River, ſo called from the ſwiftneſs of its ſtream, cauſed by the many ſhoals and cataracts. You may go from the mouth of the Great River to that of the *Biſtroy*, and up within 40 verſts of its head; and from thence over a carrying place to the river *Kamtſchatka*, that ſprings out of the ſame marſh, and runs quite to the Eaſtern Ocean. And though this paſſage muſt be laborious and tedious, upon account of the rapidity of the river, and the many ſhoals and cataracts, where every thing muſt be carried by land, and which would render it impoſſible to advance more than 10 verſts in a day (as I found in my way to *Kamtſchatka* in the year 1739, when the boats were carried over the marſh, about two verſts from the head of the Rapid, to *Kamtſchatka*); yet, conſidering

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

489 considering that all ſorts of carriages in the ſummer are worked from one ſettlement to another by men, the ſaid paſſage by water would be a great help to the people of this country who are obliged to carry ſtores and baggage for the government: for, inſtead of employing 10 or 15 men about a carriage of 20 pood, the ſame would be performed with leſs trouble in a ſmall boat by two; and to encreaſe the facility of commerce, there would at all times be a free road, which is the caſe now only in winter.

It may be hoped, however, that even without ſuch a road this difficulty will be removed, when the new colony ſettled there ſhall have a ſufficient number of horſes for drawing thoſe carriages. From the *Bolſcheretſkoi* to the upper fort you may travel in carts drawn by horſes; but, in ſummer, this is practicable in no other part of the country by reaſon of frequent obſtructions from rivers, marſhes, lakes, and high mountains.

133 The *Baranew* rivulet is particularly remarkable for the number of boiling ſprings which are found near it. It falls into the *Keekſha*, on the ſouth-eaſt ſide, 44 verſts from *Bolſcheretſkoi*; and upon the mouth of it ſtands the ſettlement *Kalickin*, or *Opachin*, which is about 70 verſts diſtant from the boiling ſprings.

The river *Awatſcha* riſes from under a mountain about 150 verſts from its mouth, and runs from weſt to eaſt 'till it falls into the bay of St. *Peter* and St. *Paul* in the Eaſtern Ocean, almoſt in the ſame latitude with the *Keekſha*. This river is very near as large as the laſt, and of more utility.

The bay of St. *Peter* and St. *Paul*, or *Awachinſkaya* bay, is 14 verſts in length, and as many in breadth, of a circular form, and ſurrounded on all ſides by high rocky mountains. Its mouth, conſidering the ſpace of the bay, is very narrow, and ſo deep that ſhips of all dimenſions may enter it without any danger. Upon its banks are built, by order of the navy, officers' apartments, barracks, magazines, *&c.* On the north ſide of the

Awachinſkaya

134 present are no woods, but only ſhrubs, and ſtunted ſallows, and birches, were formerly covered with water, which has decreaſed by degrees here, as it has upon the north-eaſtern coaſt. Below the earth lies a bed of pure ice, extremely hard; and under that a ſoft wateriſh clay, with gravel; this continues from the ſea up to the very mountains, and will ſufficiently account for the barrenneſs of theſe parts. But, though the land is not every where fit for agriculture, yet ſome places upon the river *Kamtſchatka* (which have been already mentioned) and along the *Biſtroy* river, are ſufficient to furniſh with corn, not only the inhabitants, but alſo the neighbouring parts. It is however to be feared, that the burning of the woods, in order to clear the lands, may drive away the ſables, who have a particular averſion to ſmoke: this happened upon the river *Lena*, formerly the beſt hunting country, but now deſerted by theſe animals.

137 The ſcarcity of wood is a great inconvenience, both the *Ruſſians*
313 and natives being obliged to fetch it twenty or thirty verſts with
489 great trouble and loſs of time, for the neceſſary uſes of boiling their ſalt and curing their fiſh: and it is very difficult to bring it down in floats, becauſe the current is rapid and ſo ſhallow, that they can bring only two little bundles on each ſide of a ſmall fiſhing-boat; otherwiſe they would obſtruct themſelves in the management of their boat, and thereby run the riſk of being driven upon the rocks, ſand-banks, and trunks of trees, where not only their boat and wood, but frequently the people themſelves are loſt. Sometimes the ſcarcity of wood is ſupplied by ſuch as is thrown up by the ſea, which the inhabitants gather upon the ſhore; but this wood that has been ſoaked in the water, although they are at great pains to dry it, never burns clear, but ſmothers away with a continual ſmoke very hurtful to the eyes.

137 At the diſtance of 30 or 40 verſts from the ſea, and near the
313 heads of the rivers, grow birch-trees, alder, and poplar; of which the people build their houſes and make their boats. But this

29:Cochrane T-2 (1821-22)1824 Kamchadal

164 posed to have fallen victims to it within a short
758 period. Yet at this moment there is a want of
R vaccinating matter, nor is it a questionable asser-
177 tion that the quality of medicines in the hospitals
.75 is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

136 Besides these two diseases, the inhabitants of
146 Kamtchatka are subject to all those which make
262 havoc in countries where the people are ordinarily
489 ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 Having described all the coast and principal rivers on the continent, we shall now proceed to describe the principal roads through this country.

CHAP. II.

Of the ROADS *in* KAMTSCHATKA.

487 491 FROM the *Bolscheretskoi* to the upper *Kamtschatkoi* fort are three principal roads: the first, along the *Penschinsky* sea; the second, by the Eastern Sea; and the third, by the *Bistroy*.

By the first they go up the river *Oblukomina* to the ridge *Oblukominskoy*, and over the ridge to the river *Keerganick*, along which almost to the river *Kamtschatka*, and from thence up the river to the upper *Kamtschatkoi* fort.

By the second they go from the *Bolscheretskoi* up the Great River to the *Nachikin* fort, and cross a small ridge to the river *Awatscha*, to the haven of *Petropaulauskay*, or of *Peter* and *Paul*; and from thence along the coast of the Eastern Sea north to the river *Shupanova*, and up that river to its head; from whence over the ridge to the river *Poweecha*, and down the mouth of that river, which is over-against the upper fort.

The third road lies from the *Bolscheretskoi* up the Great River to the *Opachin* fort; from thence through plains to the Rapid River, up to its head; and thence, down the river *Kamtschatka*, to the upper *Kamtschatkoi* fort.

They travel the two first roads chiefly in winter; the third, on foot in summer. The first and the last roads are measured, but the second is only measured half way; and the particular distances are here adjoined.

First

First road from the *Bolſcheretskoi* fort, by the *Penſchinſky* ſea. 491

	verſts	fathoms
From the *Bolſcheretskoi* office to the *Zaeemka*, or the eſtate of Mr. *Trapeznicoff*, — —	2	100
From thence to the river *Utka*, —	21	200
From thence to the *Kiechchiek*, to the *Akabeeſhevo*, — —	42	250
From thence to the *Nemtick* —	25	0
From thence to the *Kole* — —	22	0
From thence to the *Vorovſkaya* —	51	0
From thence to the *Brewmka* — —	24	0
From thence to the *Kompucovoy* —	13	0
From thence to the *Krootoborova* —	36	0
From thence to the *Oblukomina*, to the ſettlement of *Tarein*, — — —	24	0
From thence to the *Oblukominſkoy* ridge	110	0
From thence to the upper *Kamtſchatkoi* fort	65	0
	486	50

Second road from the *Bolſcheretskoi* fort, by the Eaſtern Sea.

From the *Bolſcheretskoi* fort to the ſmall fort *Opachin* — — —	44	0
From thence to *Nachikin* — —	74	0
From thence to the *Awatſcha* and the *Paratunka* — — —	68	0
From the *Paratunka* to the *Petropaulauſkaya* haven — — — —	16.	0
From thence to the rivulet *Calabturka* —	6	0
From thence to the fort *Nalacheva* —	34	0
In all from *Bolſcheretskoi* to the ſmall fort *Nalacheva* — — —	242	0

From

491 From the river *Nalacheva* they in fix days arrive at the upper fort.

Third road from the *Bolſcheretskoi* fort, by the Rapid River.

	verſts	fathoms
From the *Bolſcheretskoi* fort, up along the Great River, to the *Opachin* ſmall fort ——	44	0
From thence to the upper ford ——	33	0
From thence to the ſettlement of *Abanichevo*	22	0
From thence to the ſettlement of *Ganaline*	33	0
From thence to the head of the *Kamtſchatka*	41	0
From thence to the upper *Kamtſchatkoi* fort	69	0
In all from the *Bolſcheretskoi* to the upper *Kamtſchatkoi* fort —— ——	242	0

485 In all the places expreſſed in the tables the travellers take up lodgings at night, except where the diſtance is only five or ſix verſts. Notwithſtanding the great diſtance between the *Obluko-minſkoy* and the upper *Kamtſchatkoi* fort, in good weather they travel it in three days, lying two nights in deſert places.

487 There are other roads from the *Bolſcheretskoi* to the upper fort,
491 both from the *Penſchinſka* ſea and from the Eaſtern; for every river there that falls into either of thoſe ſeas has a paſſage to *Kamtſchatka:* but, as nobody except the *Kamtſchadales*, and ſometimes the Coſſacks, in great neceſſity, travel them, it was not thought material to deſcribe them; nor can one well aſcertain the diſtances by their journeys.

They go from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort, either through the upper *Kamtſchatkoi* fort, or by the coaſt of the Eaſtern Sea. From the upper *Kamtſchatkoi* fort the way is along the river *Kamtſchatka*, except where the river makes great windings.

windings. The diſtance from the upper to the lower *Kamtſchatkoi* fort is laid down in the following table. 491

	verſts	fathoms
From the upper *Kamtſchatkoi* fort to the river *Keergena* —	24	0
From thence to the ſmall fort *Maſhurin*	32	0
From thence to the ſmall fort *Nachikin* —	87	0
From thence to *Golka* —	33	0
From thence to the ſmall fort *Talecheva*	26	0
From thence to the *Uſhky* —	16	0
From thence to the *Krewky* —	25	0
From thence to the *Kreſtee* —	25	0
From thence to the *Gorboon* —	26	250
From thence to the *Harchin* —	11	0
From thence to the *Camenoy* ſmall fort	27	0
From thence to the *Cavanackey* —	16	0
From thence to the *Kamack* —	6	0
From thence to the *Hapick* —	8	250
From thence to the *Schockey* —	9	0
From thence to the *Obooboffs* ſettlement	17	250
From thence to the lower *Kamtſchatkoi* fort, to the church of St. *Nicholas*, —	7	250
In all from the upper to the lower fort —	397	0
And from the *Bolſcheretskoi* —	833	50
	1230	50

The other road from the *Bolſcheretskoi* to the lower *Kamtſchatkoi* fort being meaſured only to the *Nalacheva* fort, it cannot exactly be known which is the neareſt way; but one may imagine that there is not much difference between them. 485 491

The

485 The chief places on that road where they usually lodge at night are the small forts of *Opachin*, *Nachiekiok*, and the *Tarein*; the haven of *Peter* and *Paul*, which was formerly called the small fort *Austin*; the *Ostrovenaya* river, *Supanova*, and the *Chazma*; upon all which rivers there are *Kamtschatkoi* habitations.

487 From the *Chazma* to the river *Kamtschatka* the road lies over
491 desolate mountains; and they come upon the river just by the village *Oboobossi*, seven versts and a half above the lower *Kamtschatkoi* fort, lodging but one night in a desert place.

From the lower *Kamtschatkoi* fort to the northern parts two roads are made, the one is by the *Elouki*, to its head; and from thence over a ridge to the head of the river *Tegbil*, along which they go quite to the sea; and from thence, not far off from the sea, to the rivers *Lesnaya* and *Podkargirnaya*.

In a moderate way of travelling, when there is no hindrance from bad weather, they go from the lower *Kamtschatkoi* fort to the lower *Tegbilskoy* small fort, called *Sbipin*, in 10 days.

By the second road they may travel in the same manner to the river *Karaga* in ten days, whose head is near the river *Lesnaya*.

From the upper *Kamtschatkoi* fort to the *Tegbil* the common road is by the river *Elouki*: first, over the ridge to *Oblukominskoy* fort, and from thence north by the *Penschinsky* sea; and another road is by the river *Krestovaya* to the *Harbossova*.

By the first road they may reach *Tegbil* in 10 days; but they very often lodge the tenth night on the road, not so much on account of the distance as the badness of the roads, and the very mountainous places over the *Utkolotskoy* cape. The second road requires 11 or 12 days.

The passage along the *Elouki* to the *Tegbil* is the longest of all, for that requires above 14 days' journey.

From the *Bolscheretskoi* fort southward to the *Kurilskaya Lopatka* the usual passage is nine days. The distance from the

Bolscheretskoi

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

491 *Bolſcheretskoi* fort to the *Kurilskaya Lopatka* is 210 verſts 300
487 fathoms, which ſpace may be eaſily travelled, even in four days; but the Coſſacks of thoſe places have a cuſtom of ſtopping at any ſmall fort, under pretence of ſome buſineſs there, though their moſt probable motive is to refreſh their dogs. At a middling rate I have travelled in three days from the *Kamtſchatkoi* to the *Bolſcheretskoi*, which is near 150 verſts.

	verſts	fathoms
From the *Bolſcheretskoi* fort to the mouth of the Great River — — —	33	0
From the mouth, along the ſea-ſhore, to the river *Opala* — —	85	0
From thence to the *Koſhubochiek* —	18	0
From thence to the *Yavina* —	15	0
From thence to the river *Ozernaya* —	15	0
From thence to the *Kambalina* —	36	300
From thence to the *Lopatka* —	27	0
In all from the *Bolſcheretskoi* to the *Kurilskaya Lopatka* — —	210	300

CHAP. III.

Of the KURILSKI ISLANDS.

101 UNDER the name of *Kurilski* iſlands are underſtood all
131 thoſe iſlands which extend from the *Kurilskaya Lopatka*, or the ſouthern end of *Kamtſchatka*, in a row ſouth-weſt quite to *Japan*. They derive their names from the inhabitants of thoſe iſlands which lie neareſt to *Kamtſchatka*, who are called by

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon fliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodovſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 491 484

'till

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

484 491 'till he comes to ſome dwelling-houſe. This is very laborious, but it happens ſo often, that no guide ever ſets out without his ſnow-ſhoes.

484 The greateſt danger is when a ſtorm of driven ſnow ſurpriſes them; then they are obliged with all haſte to ſeek the ſhelter of ſome wood, where they ſtay as long as the tempeſt laſts, which ſometimes is a whole week. If a ſtorm at any time ſurpriſes a large company of travellers, they dig a place for themſelves under the ſnow, and cover the entry with wood or bramble. The *Kamtſchadales* ſeldom make theſe temporary huts, but hide themſelves commonly in caves or holes of the earth, wrapping themſelves in their furrs; and when thus covered, they move or turn themſelves with the greateſt caution, leaſt they ſhould throw off the ſnow, for under that they lie as warm as in their common huts: they muſt only have the convenience of a breathing place; but if their cloaths are tight or hard girt about them, the cold is unſufferable.

If the ſtorms ſurpriſe them in an open country where there is no wood, they endeavour to find ſome hollow place, in which they ſhelter themſelves, but muſt be careful to prevent being ſmothered with the ſnow. The eaſt and ſouth-eaſt winds are generally attended with a moiſt ſnow, which wets the travellers; and being followed with the north wind and ſevere colds, ſeveral are then frozen to death.

Another danger attending the traveller is, that in the ſevereſt froſt ſeveral rivers are not quite frozen over; and as the roads for the moſt part lie cloſe upon the rivers, the banks being very ſteep, few years paſs in which many people are not drowned. A diſagreeable circumſtance alſo to thoſe who travel in theſe parts is their ſometimes being obliged to paſs through copſes, where they run the riſk of having their eyes ſcratched out, or their limbs broken; for the dogs always run moſt violently in the

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

hears their continual howling night and day. In the winter 231
they are fed with opana and fish-bones, which are laid up for them in summer. The opana is thus prepared :---As much water as they think their dogs want they pour into a large trough, and then throw in some ladlefuls of sour or rather rotten fish, which is prepared in pits for this purpose, adding to this some fish-bones, and heating the whole with glowing stones until the fish and bones be boiled. This opana is reckoned the best and most agreeable food for the dogs, and they feed them with it only at night, which makes them sleep well; but never give them any in the day when they design to travel, because it would make them heavy and lazy: though they be never so hungry they will not touch bread; but rather than that, eat their own bridles, reins, or harness, if they can get at them. How- 231
ever fond they may be of their master, yet, if he happens to 492
fall out of his sledge, and lose his hold of it, they run away without regarding him; and he must walk on foot until the sledge be overturned, or catched and stopped by something or other; and therefore he ought to be careful never to lose his hold, but rather submit to be dragged upon his belly until the dogs tire. Besides, upon any steep descent, especially the banks of rivers, one half of them must be unyoked, otherwise they are not to be managed; for those that appear quite tired shew an uncommon vigour in such places, and the more dangerous the descent is the more strength they exert. They are in like manner unruly if they find the scent of the deer, or hear the howling of other dogs in the villages near at hand. But for all this, the dogs are, and always will be, absolutely necessary in *Kamtschatka*, even although there should be plenty of horses; for they could seldom be used in winter on account of the great depth of snow, and the frequency of hills and rivers; and in summer, the bogs are so frequent, that some places are impassable even for men. Besides dogs have this advantage over horses; that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

231/ in the greateſt ſtorm, when a man cannot ſee the path, nor even
492 keep his eyes open, they very ſeldom miſs their way; and if
825 they ſhould, they go from one ſide to the other, 'till by the
237 ſmell they find it again: and when it is abſolutely impoſſible to
787 travel at all, which often happens, then the dogs lying round their maſter defend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231/ Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

CHAP.

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CHAP. IX.

231 *The Method of* TRAVELLING *with* DOGS, *and the* FURNITURE *necessary thereto.*

THE Dogs of *Kamtschatka* differ very little from the common house dogs: they are of a middling size, of various colours, though there seem to be more white, 492 black, and grey, than of any other. In travelling they make use of those that are gelded, and generally yoke four to a sledge.

The alaki is made of broad double soft straps, which are put over the dogs' shoulders, the near dog having it over his left, and the off dog over his right. At the end of these alaki's is a small thong, with a hook at the end of it, which is fastened to a ring in the fore part of the sledge.

The pobeshnick is a long strap, and serves instead of a coach pole. It passes through a ring, which is in the middle of the fore part of the sledge; and to it is fastened a chain that keeps the dogs together, that they should not run asunder.

The bridle is a long strap, with a hook and chain, which is fixed to the fore dogs, and is much longer than the pobeshnick, being fastened to a ring in the fore part of the sledge.

The osheiniki, or collars, are broad straps made of bear-skin, and are frequently put upon dogs merely for ornament.

They drive and direct their dogs with a crooked stick about four feet long, which they call the ostal, and sometimes adorn it with different coloured thongs: this is looked upon as a great 493 piece of finery. They drive their sledges sitting upon the right side

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon ſliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodovſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 'till 491 484

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
●492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

7:Lesseps T-3 (1787-88)1790 Kamchada

226 by closing up the river with stakes and branches of trees, so as to leave only a narrow passage for the fish, or sometimes several, where they place baskets, so constructed that, if the fish once enter, it is impossible for them to retreat.

231 Horses are very scarce in Kamtschatka.
492 I saw some at Bolcheretsk belonging to government, and intrusted to the care of the Cossacs. They merely serve during summer for the carriage of merchandize and other effects of the crown, and for the convenience of travellers.

Dogs however abound in this country, and are so serviceable to the Kamtschadales as to render the privation of the other domestic animals less felt by them. They serve all the purposes of carriage, and are fed without difficulty or expence, their food consisting entirely of the offals, or such decayed

7:Lesseps T-3 (1787-88)1790 Kamchadal

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fish as are rejected by their masters; and even these are not allowed, unless when it is necessary. In summer, which is their season of rest, little care is taken of them; the dogs well know how to provide for themselves, by ranging over the country and along the sides of lakes and rivers; and the punctuality with which they return, is one of the most striking proofs of the fidelity of these animals. When winter arrives, they dearly pay for the liberty and temporary repose they have enjoyed. Their labour and slavery begin anew, and these dogs must have extreme vigour to be able to support them. Ma nwhile they are not remarkably large, and resemble pretty exactly our mountain dogs, or such as are commonly used by shepherds. There is not an individual inhabitant, Russian or native, that has less than five. They make use of them when they travel, when they go to the forests to cut wood, and for the conveyance

7:Lesseps T-3 (1787-88)1790 Kamchadal

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492

veyance of their effects and provisions, as well as their persons. In short, these dogs conduct travellers from place to place, and horses could not in reality be more serviceable. They are harnessed to a sledge two and two together*, with a single one before as a leader. This honour is bestowed on the most intelligent, or the best trained dog, and he understands wonderfully the terms used by the conductor to direct his course. The cry of *tagtag*, *tagtag*, turns him to the right, and *kougba*, *kougba*, to the left; the intelligent animal understands it

* They are castrated like horses, but the mode of performing the operation is different. The Kamtschadales do not extirpate the testicles, but bruise them, and the instrument they make use of is their teeth. Some of them do not survive, and others are crippled and unfit for service. In the mean time it is imagined that equal advantage could not be derived from these animals, if they were permitted to remain in their natural state; it would not be practicable to harness them with females. All the males, however, are not mutilated; a sufficient number is reserved for the preservation of the species, and these are frequently used for hunting.

7: Lesseps T-3 (1787-88)1790 Kamchadal

231 immediately, and gives to the reſt the ex-
492 ample of obedience: *ab*, *ab*, ſtops them, and
493 *ba* makes them ſet off. The number of dogs that it is neceſſary to harneſs, depends upon the load; when it is little more than the weight of the perſon who mounts the ſledge, it is conſidered as a common ſledge, or *ſaunka**, and the team conſiſts of four or five dogs. The harneſs † is made of leather. It paſſes under the neck, that is, upon the breaſt of theſe ſteeds, and is joined to the ſledge by a ſtrap three feet long, in the manner of a trace: the dogs are alſo faſtened together by couples paſſed through their collars; theſe collars are frequently covered with bear's ſkin, by way of ornament.

493 The form of the ſledge is like that of an

* The ſledges for baggage are called *narta*, and are drawn by ten dogs.

† Called *alaki*.

oblong

493 for that purpoſe, and are adapted to receive a part of the baggage. The front of the ſledge is farther adorned with floating reins or ſhreds of leather, which are of no uſe.
492 The charioteer has nothing in his hand but a curved ſtick, which ſerves him both for rudder and whip. Iron rings are ſuſpended at one end of the ſtick, as much for ornament, as to encourage the dogs by the noiſe which theſe kind of bells make, and which are frequently jingled for that purpoſe; the other end is ſometimes pointed with iron, to make an eaſier impreſſion on the ice, and ſerves at the ſame time to guide the ardour of theſe animals. Dogs, that are well trained, have no need to hear the voice of the conductor; if he ſtrike the ice with his ſtick, they will go to the left; if he ſtrike the legs of the ſledge, they will go to the right; and when he wiſhes them to ſtop, he has only to place the ſtick between the ſnow and the front of the ſledge. When they

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 dents, for in every attempt I paid the tribute of inexperience. Seven times did I fall in taking my first lesson, but without receiving any injury; and I only returned with more eagerness to take a second, then a third, then a fourth; in short, a day scarcely passed, without my making some progress. The number of my falls diminished, in proportion as I acquired more knowledge and skill, and my success rendered me such an amateur of this exercise, that in a short time I acquired a degree of reputation; it cost me, however, considerable pains to habituate myself to the observance of the ne-
492 cessary equilibrium. The body is, as it were, in continual motion. Here we must lean to the right, because the sledge inclines to the left; there we must suddenly change to the left, because it leans to the right; the next minute, perhaps our posture must be erect; and if we fail in quickness or attention, it is seldom that an immediate over-

throw

7:Lesseps T-3 (1787-88)1790 Kamchadal

492 throw is not the conſequence. In falling, it is ſtill neceſſary not to quit the vehicle, but to hold it as firm as poſſible, in order to create a ſufficient weight to impede the dogs, who, as I have already ſaid, will otherwiſe advance full ſpeed. The common mode of ſitting in a ſledge is ſide ways, as a lady rides on horſeback; we may alſo ſit aſtride; but the point of main difficulty, the *ne plus ultra* of addreſs and of grace, is to be able to ſtand upon one leg: it is excellent to ſee an adept in this ſtriking attitude.

For myſelf, I was no ſooner able to drive, than I abandoned every other mode of conveyance. Always accompanied, becauſe of the roads, I ſometimes took a ride, and
132 ſometimes went a hunting. The tracks of hares and partridges were perceptible on the ſnow*, and to ſuch a degree, that it appeared

* The ſnow began to fall 5 November, and ſo heavily, that the country was covered almoſt immediately. But the froſt

22: Guillemard T-2 (1882) 1886 Kamchadal

175 In the opinion of those who had been in Petropaulovsky at the time, the disaster was chiefly due to the division of the forces on landing,—one body getting ahead of, and being fired into by the other. The thickness of the bush prevented a recognition of this error, and the attacking party imagined themselves taken in rear. The Cossacks took advantage of the mistake, and before long the Allies were in a state of confusion which the nature of the ground rendered hopeless. More met their death by being driven over the precipice, it was said, than actually fell before the rifles of the Cossacks.

The victors were left in peace for the time being, but, in the spring of the following year, the Allied Squadron once more made its appearance. The *President*, *Pique*, *Dido*, *Brisk*, *Encounter*, and *Barracouta*, together with the French frigate *Alceste*, assembled off Kamschatka, and entered Avatcha Bay on the 31st May, 1855. They found the town completely deserted by the Russians. Three foreign residents alone remained, and from them they learned that the settlement had been evacuated by order of the Emperor upon the breaking up of the ice. Even the natives had fled. On the 7th June the batteries and magazines, which had been strengthened and increased in number since the engagement in the preceding year, were blown up, and two days later all the Government buildings were burnt to the ground. The latter proceeding was, in all probability, the wanton act of some English blue-jackets, and was done without the knowledge of our authorities. It was an unfortunate occurrence, the explanation of which could hardly be expected to be believed by the Russians, and the affair still rankles in the breast of the inhabitants of the little settlement.

A few days later the Squadron left, and the inhabitants returned to their homes. Poor little Petropaulovsky has to rest content on her honours of 1854, for the town has never been re-fortified, and is now no longer a military post.

231 One cannot be long in Kamschatka without making the
492 acquaintance of that very necessary animal, the sledge-dog. When

231/492 the fact is taken into consideration, that for every inhabitant of the peninsula there are at least five or six of these animals, it will be understood that the effect produced is hardly inferior to that exhibited by the streets of Constantinople. "A dog's life" is a phrase which is here most appropriately realised. No comfortable homes are provided for them to enable them to withstand the rigours of the arctic climate, and the poor beast, except when actually at work, has in most cases to "find himself." Long experience, and the instinct transmitted to him by his ancestors, has, however, given him all the resources of an old campaigner. Stumbling at night about the uncertain paths of the settlements, the traveller is not unfrequently precipitated into the huge rabbit-burrows which the animal constructs to avoid the cutting winds. His coat, nearly as thick as that of a bear, is composed of fur rather than hair. As for his manners, they are, like those of the midshipman's savage, almost non-existent. He has thoroughly grasped the fact that self-preservation is the first law of Nature, and does not scruple to act upon it, in its widest meaning, upon every occasion. Wonderfully well-trained, cunning, and enduring, he is at the same time often obstinate and unmanageable to a degree, and is apparently indifferent to the kicks and blows so liberally showered upon him by his master. Excepting in settlements where neighbouring stretches of *tundra* render the use of sledges possible in summer, he has a long holiday during that season. During this time he wanders over the country at will, sometimes returning at night to his burrow, at others being absent for days together. A good hunter and fisherman, he supports himself upon the game and salmon he catches, and it is but rarely that he deserts his master for good. But the inhabitants have to pay a good price for
231 his services. Owing to his rapacity, it is impossible to keep sheep,
136 goats, or any of the smaller domestic animals, and Kamschatka is one of the few countries in the world in which fowls are unknown.[1]

[1] In Petropaulovsky this loss is partially made up for by large quantities of sea-birds' eggs brought from Okhotsk, and the islands at the mouth of Avatcha Bay.

22: Guillemard T-2 (1882) 1886 Kamchadal

122 produce dinners under the most trying circumstances which would not have disgraced the table of an alderman. European servants are, in rough travel, by no means always an unmixed good, and it is pleasant therefore to have to record an instance to the contrary. Nor were we much less fortunate in our two guides. Both were old sable-hunters and good backwoodsmen. Jacof Ivanovitch was a solemn, but good-humoured Siberian Russian, who knew the country well; and Afanasi Waren, in whom there was more than a suspicion of English blood, spoke our language very fairly. The latter was a jovial soul with a merry eye, and if report ran true, a great lady-killer. Under the sobriquet of "Half-nasty" he afterwards became an equally great favourite with our crew. Our complement was made up with three half-breed natives, in charge of the packhorses, in whose favour there is but little to say. Of the misdeeds of one of them, whom, from his partiality for the liquor of the country, we afterwards nicknamed Vodki, I shall have more to say in the sequel. Lazy, untruthful, and apt brutally to ill-treat their horses whenever we were not at hand to interfere, they caused the only trouble we had during the first part of our journey. The inhabitants of the river settlements that we were destined to meet with later were, however, as will be seen, far worse; and in comparison with them, our horseboys came afterwards to be regarded in a far more favourable light than they really deserved.

AFANASI WAREN.

492 The pack-saddles used throughout the country are of an excellent pattern, and owing to the hooks with which they are provided, the necessity for the many lashings which are so in-

22: Guillemard T-2 (1882) 1886 Kamchadal

492 convenient in this kind of travelling is avoided. A thick layer of bearskin was placed over the saddle-cloth, and effectually prevented sore backs. Our personal gear, enclosed in bags made from the skin of the hair-seal, was easily adjusted, but the photographic apparatus and other breakable objects required more care and time,
133 and it was noon before we were fairly off. We bade adieu to our
487 friends, and passed out through the narrow gap at the back of the village towards a small lake of brackish water which hems it in to the north. Here at one time stood the hospital mentioned in Captain Cook's "Voyages," but no trace of the building now remains. Circumventing the lake, we struck off to the north-west and, before long, the track, which had never been very well marked, became obliterated. Our path led through a rough but picturesque country, dotted here and there with stunted birches, and we steered across it for a certain point in the landscape recognised by our guides. By our side trotted one of the most ornamental members of the expedition, whom I have hitherto neglected to introduce—Verglaski, a magnificent bear-dog belonging to Jacof, of an aspect almost as solemn as his master. Our horses had hitherto gone fairly well, but during a short halt that we made to adjust some of the packs a stampede occurred, and in an instant the scene was changed to one of the wildest confusion. Kicking, plunging, colliding against trees, and dashing wildly in all directions, it was not long before the horses succeeded in disembarrassing themselves of their loads, and the ground presented the appearance of having been recently passed by a beaten army in full retreat. The horseboys, more than half drunk, pursued the fugitives, cursing volubly in Russian and Kamschatdale; while we, to whom these little unpleasantnesses of packhorse travel had not even the merit of novelty, lit our pipes resignedly and proceeded to gather up the fragments. It was a full hour ere we were again *en route*. These incidents, "tedious as a twice-told tale," and trying alike to the temper and the baggage, recurred again and again. We progressed, as it were, by a series of stampedes, and our horseboys became almost as erratic in their locomotion as their charges.
[of Petropavlovsk--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

000 who suffer from a plethora of callers in our own country. I commend the suggestion to the more progressive of my readers.

231/492 The inhabitants of the village had already begun to get in and tie up their dogs in anticipation of the coming winter. There were over two hundred of them here, and we had ample opportunity of studying their habits. Most of them are white, with

BALAGAN AND SLEDGE DOGS.

black heads, or entirely of a brown-black, and their general aspect, owing to the sharp muzzle and prick ears, is decidedly wolf-like,—an appearance that one is familiar with from the sketches of North American travellers. The only food they are provided with by their masters is salmon of the hump-backed kind—the Garbusa; but during the summer, as I have already said, they pick up game, eggs, and birds in their wanderings about the country. They are usually inspanned in teams of eight or ten, but where the sledges are heavy or the roads bad, double that number, or even more, are occasionally used. When the snow is hard and even, they will

22: Guillemard T-2 (1882) 1886 Kamchadal

231
492

draw a weight of 360 lbs. a distance of five-and-thirty or forty miles with ease in a day's work; and with an unloaded sledge with a single occupant, a pace of eight versts an hour can be kept up for a considerable time. On the road they are given one-third of a fish twice during the day, and a fish and a half at night, which they wash down with a few gulps of snow. The dogs are castrated when puppies, and have their tails cut at the end of the first year. Each has a name, which he answers to when he is driven in the sledge just in the same way as a Cape ox in a waggon team, for no whips are used. If chastisement be necessary, the driver throws his stick at the delinquent, or pounds the unfortunate creature with any stone that comes handy. There are many ways of tethering these animals, all having in view the one object of keeping them apart, as, excepting upon the road, they seize every opportunity of fighting. One method—the one that obtrudes itself most upon the traveller's notice—is by making a large tripod of poles, and tying a dog at the bottom of each; and in many villages, owing to the large number of dogs which have to be kept, these tripods form a characteristic feature.

000 We had many reasons to induce us to take a couple of days' rest at Gunal. Louis was suffering from a chill consequent on the wetting of the previous day; one of us had a slight touch of fever caught some years before in Africa; and at the camp kitchen Cook sat a prisoner as a surgical patient, imperturbably smoking cigarettes and picking up Russian from Afanasi. A slight injury to the ankle, combined with mosquito bites and many hours of riding, had produced an inflamed leg,—a rather awkward accident at this juncture, as we wished to press on as rapidly as we could. In addition, the camp gear needed drying after Vodki's exploit, and as there were said to be plenty of bear in the neighbourhood, we settled to remain.

The following day was gloriously hot, and before long the camp presented the appearance of a washerwoman's drying-ground. The sun heat was, indeed, so great that we gladly took refuge in

24: Lansdell-636-637 M-2 (1879) 1882 Kamchadal-1-2
116, 136, 231, 492

" Among the animals of Kamchatka there is none with which the traveller becomes more familiar than the dog, which is found wild on the hills. The color is usually buff or silver-grey, and in nature and disposition he resembles the mastiff and the wolf, [637] sleeping, like the latter, more by day than by night. He is intelligent as regards his work, but not affectionate, as may be said of the steppe dogs, and has to be ruled by the rod. It is not usually safe to leave these dogs loose, for they kill fowls, deer, smaller dogs, and sometimes even children. (1) As on the Amur, they are usually fed on fish,

1. They love sledging, and upon a journey of four or five days will work from 14 to 16 hours out of the 24 without tasting food, the idea of their masters being that, when travelling, the less food the dogs receive, short of starvation, the better. The travelling sledge weighs about 25 lbs. (a freight sledge is heavier), and a good team will travel from 40 to 60 miles a day. When running, they must be paired with dogs known to each other from puppies; and, should they happen to cross the scent of a deer, so fond are they of its flesh that they sometimes become utterly unmanageable, upset the sledge (or nartee, as it is called), and leave the driver, it may be, to perish in the snow.

particulary the salmon, besides which there are caught in Kamchatka, or off its coasts,

24:Lansdell-636-637 M-2 (1879) 1882 Kamchadal-2
116, 136, 231, 492

the cod, herring, smelt as also whales, walruses, and seals. The country abounds with geese, ducks, and a variety of wild fowl."

28: Sarytschew--63-64 T-1 (1789-90) 1806 Kamchadal-1-2
116, 231, 492, 493

"On the approach of winter, the inhabitants are busied with putting their sledges in order, and tying up their dogs, to fit them for drawing, as they are in fine weather allowed to run loose. Sledges and dogs are in general use here, both for travelling and conveyance. ...

The sledges here differ very considerably from those of Ochotsk, being shorter, smaller, lighter, and much higher. They will scarcely hold two, and are very unsteady on account of their monstrous height. In descending any hill, the utmost care and dexterity is requisite, to keep the feet and the oschtol in the proper direction; for the smallest oversight of this kind may cost a person his life, as has been the case with even experienced drivers, who have been dashed to pieces against the trees lying in the way.

The management of the dogs is no less difficult and dangerous here than at Ochotsk; for they are equally apt to become ungovernable on the scent of any animal. In order to stop them, they drive the oschtol between the front sledge of the conveyance as far into the snow as possible, and always keep the two fore dogs in a tight rein, that none may be able to run away. When the declivity of any mountain is unusually steep and dangerous, they bind birch-twigs round the bottom of the sledge, to impede its course. The cry of ko ko ko stops the dogs; aach aach drives them on; chna chna chna, turns them to the right; and uga uga uga, to the left. Hunters to not make use of these words, for fear of frightening their game, but strike gently with the oschtol on the right side of the sledge, when they should turn to the right, and bend them down to the snow to the left, when they

should go to the left. Besides the danger in this mode of travelling, it is attended with many inconveniences. You must never let your dogs go loose. If ever you are overturned, you must rather be dragged along in the snow than leave your hold, for it is a great disgrace to lose your [64] dogs, and be obliged to wade through the snow on foot; not to mention that the dogs very often entangle themselves in their harness, in which case, the driver must take off his gloves in the cold to put them to rights, and is often in danger of being soiled with their dung. The worst trick you can play a driver, is to cast a piece of jukol among his dogs, who fight for it until they are thrown into the utmost confusion. If he be in company with others, he is thus prevented from keeping up with them, and exposed to all the inconveniencies of going behind; the principal of which is, that the dung of the other dogs is continually freezing on his sledge, and requires him every moment to clear it away with his knife. When you get to a public-house, you are not free from your dogs. The instant they are unharnessed, they must be tied to a post. Nor can they be immediately fed, for they must wait until the sweat is dried off. A whole or half a jukol is then given them, but the master must stand by to see that every dog gets his part, and also to drive away the crows, which are not very shy in this country. They will collect in great quantities round the dogs if not thus guarded, and snap up all their allowance."

A 492 493 648 /487 cont./

oppression of Japanese domination weighing down upon them and paralyzing the general life of the people.

It is known from the detailed descriptions by Steller (2) and

K 492 493 [113]

2. Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, pp. 132 ff, 370 ff.

Krascheninnikof that the Italmen on Kamchatka since time immemorial have used dogs for traveling, for which they selected and trained the largest and strongest of them and built sleds of a peculiar form and construction. Like the Gilyak sleds, the Kamchadal sleds, too, were characterized by their extreme lightness, flexibility, and durability; /488/ but whereas the former are shallow and low, the latter had a relatively high-placed and deep sled-basket, on which the dog-driver usually sat side ways and only at times astride. Later the Russians in Kamchatka adopted this type of sled and have them even today (1). Besides them,

K [171]

K 493 171 NS 493 177 171

1. Several sleds of this type brought from Kamchatka in the previous century have been preserved in the Anthropological-ethnographic Museum of the Academy.

however, they were also, even in Steller's time, and especially for the transportation of heavier loads, using the above-mentioned long and broad-soled dog-sleds or narten (2) such as are also

2. Steller (op. cit., p. 370) calls them "narden."

customary elsewhere in Siberia. They may therefore have already been familiar with them before their arrival in Kamchatka. There is no reason to assume with Matjuschkin (3) that the Russians first

NS 492 114 177 [113]

3. Vrangel', Putesh. po siev. ber. Sibiri i po Ledov. moriu, Part II, p. 110, footnote *.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. IX.

231 *The Method of* TRAVELLING *with* DOGS, *and the* FURNITURE *necessary thereto.*

THE Dogs of *Kamtschatka* differ very little from the common house dogs: they are of a middling size, of various colours, though there seem to be more white,
492 black, and grey, than of any other. In travelling they make use of those that are gelded, and generally yoke four to a sledge.

The alaki is made of broad double soft straps, which are put over the dogs' shoulders, the near dog having it over his left, and the off dog over his right. At the end of these alaki's is a small thong, with a hook at the end of it, which is fastened to a ring in the fore part of the sledge.

The pobeshnick is a long strap, and serves instead of a coach pole. It passes through a ring, which is in the middle of the fore part of the sledge; and to it is fastened a chain that keeps the dogs together, that they should not run asunder.

The bridle is a long strap, with a hook and chain, which is fixed to the fore dogs, and is much longer than the pobeshnick, being fastened to a ring in the fore part of the sledge.

The osheiniki, or collars, are broad straps made of bear-skin, and are frequently put upon dogs merely for ornament.

They drive and direct their dogs with a crooked stick about four feet long, which they call the ostal, and sometimes adorn it with different coloured thongs: this is looked upon as a great
493 piece of finery. They drive their sledges sitting upon the right side

ſide with their feet hanging down; and it would be looked upon as a diſgrace for any one to ſit in the ſledge, or to make uſe of any perſon to drive them, no body doing this but the women. 493

A ſet of four good dogs will coſt in *Kamtſchatka* 15 rubles, and with their harneſs complete come to near 20. 492 435

From the make of their ſledges may be ſeen how difficult it is to travel upon them; for a man is obliged to keep the exacteſt balance, otherwiſe he is liable, from the height and narrowneſs of them, to be overturned. In a rugged road this would be very dangerous, as the dogs never ſtop 'till they come to ſome houſe, or are entangled by ſomething upon the road; for they have this fault, that in going down ſteep hills they run with all their force, and are ſcarcely to be kept in: for which reaſon, in deſcending any great declivity they unyoke all the dogs except one, and lead them ſoftly down the hill. They likewiſe walk up hills; for it is as much as the dogs can do to drag up the ſledge empty. The narta will carry, beſides the proviſions for the dogs and the driver, about five poods. With this load, upon a tolerable road, they can travel about 30 verſts a day; and without any load, in the ſpring when the ſnow is hardened, and upon ſliders made of bone, they can travel 150 verſts. After a deep ſnow there is no travelling with dogs 'till a road be made, which is effected by a man going before upon ſnow-ſhoes, whom they call *brodouſhika*. 491 481

The ſnow-ſhoes are made of two thin boards, ſeparated in the middle, and bound together at the ends; the fore part is bent a little upwards. They are bound together with thongs, and a place made to ſlip in the foot, which they likewiſe tie with thongs. The brodovſhika having one of theſe ſhoes upon each foot leaves the dogs and ſledge, and going on, clears the road for ſome way; then returning leads forwards the dogs and ſledge ſo far as the road is made; a method which he muſt continue 491 484

'till

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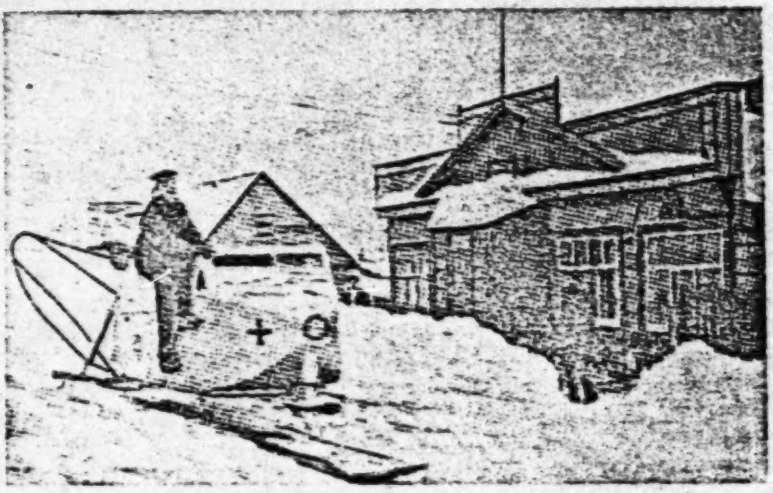

Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. However, the milk yield was very low, and livestock mortality was high.

[493] From the Russians, the Itel'mens obtained improved means of production: firearms, nets, etc. Stone and bone implements were completely
175 abandoned in favor of metal ones. Russian clothing and utensils began to
179 come into use. The primitive semidugout was gradually (and by the begin-
648 ning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Itel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Itel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
231 spawning runs caused almost annual failures of the native catch and led to inevitable famines.

Contemporary Life of the Itel'mens

175 During the civil war in the Far East, the Itel'mens actively helped the
648 guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

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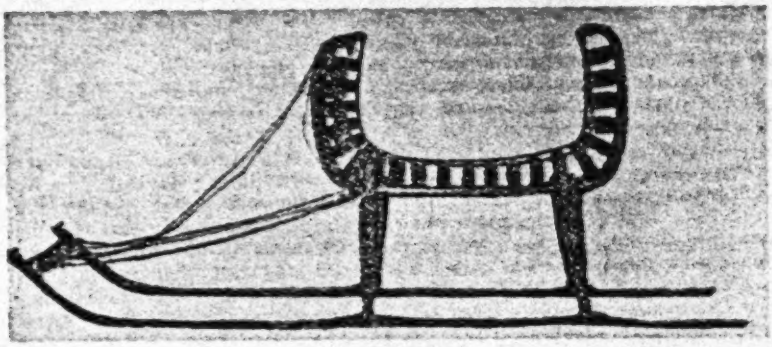


18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips.
[252] Fire was made with a wooden drill. Food, mainly fish and meat, was cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[177] harness dog-breeding of the so-called Eastern Siberian type developed in Kamchatka. However, until the middle of the 19th century, the Itel'mens
[493] used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[291] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

231 immediately, and gives to the reſt the ex-
492 ample of obedience: *ab*, *ab*, ſtops them, and
493 *ba* makes them ſet off. The number of dogs that it is neceſſary to harneſs, depends upon the load; when it is little more than the weight of the perſon who mounts the ſledge, it is conſidered as a common ſledge, or *ſaunka**, and the team conſiſts of four or five dogs. The harneſs † is made of leather. It paſſes under the neck, that is, upon the breaſt of theſe ſteeds, and is joined to the ſledge by a ſtrap three feet long, in the manner of a trace: the dogs are alſo faſtened together by couples paſſed through their collars; theſe collars are frequently covered with bear's ſkin, by way of ornament.

493 The form of the ſledge is like that of an

* The ſledges for baggage are called *narta*, and are drawn by ten dogs.

† Called *alaki*.

oblong

7:Lesseps T-3 (1787-88)1790 Kamchadal

493 oblong baſket, the two extremities of which are elevated in a curve. Its length is about three feet, and its breadth ſcarcely exceeds a foot. This kind of baſket, which compoſes the body of the ſledge, is of very thin wood; the ſides are of open work, and ornamented with ſtraps of different colours. The ſeat of the charioteer is covered with bear's ſkin, and elevated three feet from the ground, upon four legs, which diverge towards the lower extremity, and are faſtened to two parallel planks, three or four inches broad. Theſe planks are not thick, but ſo long as to extend beyond the body of the ſledge, to which they ſerve as ſupports and and as ſkates. For this purpoſe they are furniſhed underneath, in time of thaw, with three or four long pieces of whale-bone, all of them of the ſame breadth, and faſtened to the ſkates with leathern thongs. In front theſe planks bend upward, and ſo meet the poles of the ſledge, which gradually lower

493 for that purpoſe, and are adapted to receive
a part of the baggage. The front of the
ſledge is farther adorned with floating reins
or ſhreds of leather, which are of no uſe.
492 The charioteer has nothing in his hand but
a curved ſtick, which ſerves him both for
rudder and whip. Iron rings are ſuſpended
at one end of the ſtick, as much for orna-
ment, as to encourage the dogs by the noiſe
which theſe kind of bells make, and which
are frequently jingled for that purpoſe;
the other end is ſometimes pointed with iron,
to make an eaſier impreſſion on the ice, and
ſerves at the ſame time to guide the ardour
of theſe animals. Dogs, that are well train-
ed, have no need to hear the voice of the
conductor; if he ſtrike the ice with his
ſtick, they will go to the left; if he ſtrike
the legs of the ſledge, they will go to the
right; and when he wiſhes them to ſtop,
he has only to place the ſtick between the
ſnow and the front of the ſledge. When
they

493 When they ſlacken their pace, and become careleſs and inattentive to the ſignals, or to his voice, he throws his ſtick at them*; but then the utmoſt addreſs is neceſſary to regain it, as he proceeds rapidly along; and this is one of the ſtrongeſt teſts of the ſkill of the conductor. The Kamtſchadales are ſingularly expert in this exerciſe. I was in general aſtoniſhed at the dexterity they diſplayed in
000 driving their ſledges, and as I was ſoon to have the happineſs of travelling in this vehicle, I conceived that I ought to practice, not ſo much to reconcile myſelf to it, as to learn to be my own guide. It was in vain they repreſented to me the riſks I ſhould run, by expoſing myſelf alone in a ſledge, before I had acquired ſufficient ſkill to know how to conduct it; at my age we are all confident, and I liſtened not to their cautions. The lightneſs of my carriage, which ſcarcely exceeded ten pounds, its elevation,

* This ſtick is called *oſchtul*.

which

22: Guillemard T-2 (1882) 1886 Kamchadal

211 There are no roads even in the little settlement itself, and,
361 from the irregular distribution of the houses, and the equally
363 irregular ground on which they are built, the traveller has to
493 pick his way from one to another as best he can. It is needless to state that wheeled vehicles are, in consequence, unknown. The church, an uninteresting-looking building, painted white, is practically the only public edifice.[1] Near it, and at the bottom of Mr. Lugobil's garden, stands the little monument erected to the memory of Bering. It is an iron column of no great size or taste, which was sent hither years ago from St. Petersburg, and, half buried in the lush grass which at this season of the year grows so freely in Kamschatka, it looked melancholy enough. It is a cenotaph, for the bones of the celebrated navigator rest far away upon the island that bears his name. A monument to Captain Clerke, the successor of Captain Cook, is, I believe not far from it, but we did not see it. The town is, indeed, somewhat rich in these objects of melancholy interest, for in a gap in the western promontory, once the site of an old battery, the dilapidated remains of a memorial column to De la Perouse is still to be seen; while on the sand-spit at the entrance of the harbour, an erection less pleasing to the eye of an Englishman is conspicuous, commemorating the success of the Russians against the forces of the Allied Fleet in 1854.

I must confess that, previous to our visit to Kamschatka, I had been in entire ignorance of the affair that resulted in such disaster to our forces. But little known or commented on at the time, it has probably long ago passed out of the memory of most of those of the past generation; while, owing to the success with which the matter was hushed up, it had but little chance of becoming known
175 to the present. In the action of the 24th August, 1854, we suffered a defeat as humiliating as it was ridiculous, and one for which, from the circumstance of our attack having been made on a

[1] At the time of Lessep's visit, in 1787, there was no church in the settlement, but he alludes to the former existence of one, and mentions that its situation was known "by means of a sort of tomb which formed a part of it."

[Petropavlovsk--Analyst]

28: Sarytschew--63-64 T-1 (1789-90) 1806 Kamchadal-1-2
116, 231, 492, 493

"On the approach of winter, the inhabitants are busied with putting their sledges in order, and tying up their dogs, to fit them for drawing, as they are in fine weather allowed to run loose. Sledges and dogs are in general use here, both for travelling and conveyance. . . .

The sledges here differ very considerably from those of Ochotsk, being shorter, smaller, lighter, and much higher. They will scarcely hold two, and are very unsteady on account of their monstrous height. In descending any hill, the utmost care and dexterity is requisite, to keep the feet and the oschtol in the proper direction; for the smallest oversight of this kind may cost a person his life, as has been the case with even experienced drivers, who have been dashed to pieces against the trees lying in the way.

The management of the dogs is no less difficult and dangerous here than at Ochotsk; for they are equally apt to become ungovernable on the scent of any animal. In order to stop them, they drive the oschtol between the front sledge of the conveyance as far into the snow as possible, and always keep the two fore dogs in a tight rein, that none may be able to run away. When the declivity of any mountain is unusually steep and dangerous, they bind birch-twigs round the bottom of the sledge, to impede its course. The cry of ko ko ko stops the dogs; aach aach drives them on; chna chna chna, turns them to the right; and uga uga uga, to the left. Hunters to not make use of these words, for fear of frightening their game, but strike gently with the oschtol on the right side of the sledge, when they should turn to the right, and bend them down to the snow to the left, when they

should go to the left. Besides the danger in this mode of travelling, it is attended with many inconveniences. You must never let your dogs go loose. If ever you are overturned, you must rather be dragged along in the snow than leave your hold, for it is a great disgrace to lose your [64] dogs, and be obliged to wade through the snow on foot; not to mention that the dogs very often entangle themselves in their harness, in which case, the driver must take off his gloves in the cold to put them to rights, and is often in danger of being soiled with their dung. The worst trick you can play a driver, is to cast a piece of jukol among his dogs, who fight for it until they are thrown into the utmost confusion. If he be in company with others, he is thus prevented from keeping up with them, and exposed to all the inconveniencies of going behind; the principal of which is, that the dung of the other dogs is continually freezing on his sledge, and requires him every moment to clear it away with his knife. When you get to a public-house, you are not free from your dogs. The instant they are unharnessed, they must be tied to a post. Nor can they be immediately fed, for they must wait until the sweat is dried off. A whole or half a jukol is then given them, but the master must stand by to see that every dog gets his part, and also to drive away the crows, which are not very shy in this country. They will collect in great quantities round the dogs if not thus guarded, and snap up all their allowance."

Ainu ABC
Kamchadal RY3
Northeast Siberia RY1

A 492 493 698 /487 cont./

oppression of Japanese domination weighing down upon them and paralyzing the general life of the people.

It is known from the detailed descriptions by Steller (2) and

K 492 493 [113]

2. Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, pp. 132 ff, 370 ff.

Krascheninnikof that the Italmen on Kamchatka since time immemorial have used dogs for traveling, for which they selected and trained the largest and strongest of them and built sleds of a peculiar form and construction. Like the Gilyak sleds, the Kamchadal sleds, too, were characterized by their extreme lightness, flexibility, and durability; /488/ but whereas the former are shallow and low, the latter had a relatively high-placed and deep sled-basket, on which the dog-driver usually sat side ways and only at times astride. Later the Russians in Kamchatka adopted this type of sled and have them even today (1). Besides them,

K [171]

K 493 171 NS 493 177 171

1. Several sleds of this type brought from Kamchatka in the previous century have been preserved in the Anthropological-ethnographic Museum of the Academy.

however, they were also, even in Steller's time, and especially for the transportation of heavier loads, using the above-mentioned long and broad-soled dog-sleds or narten (2) such as are also

2. Steller (op. cit., p. 370) calls them "narden."

customary elsewhere in Siberia. They may therefore have already been familiar with them before their arrival in Kamchatka. There is no reason to assume with Matjuschkin (3) that the Russians first

NS 492 114 177 [113]

3. Vrangel', Putesh. po siev. ber. Sibiri i po Ledov. moriu, Part II, p. 110, footnote *.

CHAP. V.

415 325 *Of their* HOUSHOLD FURNITURE, *and other necessary Utensils.*

ALL the *Kamtschatka* houshold furniture consists in dishes, bowls, troughs, and cans made of birch bark. As these people have not the use of metals, we think it is proper to explain, how without the use of instruments of iron, they are able to perform their houshold work, such as building, sawing, making of fire, dressing their victuals; being all the while so ignorant that they can scarcely count ten. How powerfully does necessity work upon the most insensible minds!

412 Before the arrival of the *Russians* the *Kamtschadales* used stones and bones instead of metals, out of which they made hatchets, spears, arrows, needles, and lances. Their hatchets were made of the bones of whales and rein-deer, and sometimes of agate or flint stones. They were shaped in form of a wedge, and fastened to 321 crooked handles. With these they hollowed out their canoes, 415 bowls, and troughs; but with so much expence of trouble and 252 time, that a canoe would be three years in making, and a large 501 bowl one year. For this reason, a large canoe or trough was in as great esteem among them as a vessel of the most precious metal and finest workmanship is with us; and the village which was in possession of such valued themselves extremely upon it, especially if they were masters of a bowl which would serve for more than one guest. These bowls they dress their victuals in, and heat their broth by throwing red-hot stones into it.

412 Their knives were made of a greenish mountain chrystal, sharp-pointed, and shaped like a lancet, which was stuck into a

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
172 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

the ſettled *Koreki* and *Tchukotſkoi*, for want of proper timber and plank, make their baidars of the ſkins of ſea animals. 171/501

Theſe boats hold two perſons, one of which ſits in the prow and the other in the ſtern. They puſh them againſt the ſtream with poles, which is attended with great trouble: when the current is ſtrong they can ſcarcely advance two feet in ten minutes; notwithſtanding which, they will carry theſe boats full loaded ſometimes 20 verſts, and, when the ſtream is not very ſtrong, even 30 or 40 verſts.

In the larger boats they can carry 30 or 40 pood; and when the goods are not very heavy, they lay them upon a float or bridge made between two boats joined together. They uſe this method in tranſporting their proviſions down with the ſtream, and alſo to and from the iſlands.

CHAP. VI.

Of the LABOUR *appropriated to the* DIFFERENT SEXES. 221/462

IN the ſummer time the men are employed in catching, drying, and tranſporting fiſh to their habitations; in preparing bones and ſour fiſh to feed their dogs: the women, in cleaning the fiſh, and ſpreading it out to dry; and ſometimes they go a fiſhing with their huſbands. After their fiſhing is over, they gather in the herbs, roots, and berries, both for food and medicine.

In the harveſt the men catch the fiſh that appear at that time, and kill fowl, ſuch as geeſe, ducks, ſwans, and the like; they teach their dogs to draw carriages, and prepare wood for their

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals, but, not having skin boats, they do not go out to the sea, but kill those seals,
501 white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly
492 cared for, they became acclimatized in Kamchatka and are a strong race of domestic animals. The Kamchatka horses are small, short necked, wide breasted
177 and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal and Russian inhabitants of the country. They use sweet as well as sour milk and
272 pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal was the driving dog. The Kamchadal dog was regarded as the best and biggest
231 driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

[P.9]

133

A

B

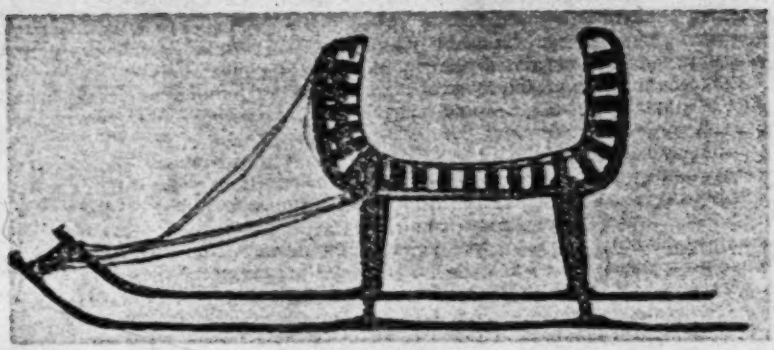
501

C

A. Two boats bridged in order to carry author's party across the Avacha River.
B. The same bridged boats carrying the author's cart to a small island and from there across the Avacha River to the village Savoiko. The horses are forced to swim across. The river is not deep and the laborers are punting the boats with long poles.
C. Three bridged boats carrying the author's party and laborers from the mouth of the Tigil River to its tributary, the Kulki River. The laborers are punting the raft along the bank.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

493



18th-century dogsled.

105

[222] handle. Later the horn was replaced by an iron tip. Gathering plants was
[462] women's work. Fishing and hunting were men's occupations, but the preserving of fish was in the woman's domain, as were the spinning of thread for the nets from nettle, the weaving of mats, and sewing of clothes. Krasheninnikov reports that preparing food, tending the dogs and all carpentry work were done by men.

The Russians found among the Itel'mens a highly developed neolithic
[321] technology. "The former Kamchatka metals, almost until the coming of
[324] the Russians, were bone and stones. They were used in the making of axes, knives, spears, arrows, lancets and needles," Krasheninnikov writes
[372] about the Itel'mens. Rock crystal was also widely used for knives and tips. Fire was made with a wooden drill. Food, mainly fish and meat, was
[252] cooked even in the early 18th century in wooden troughs, into which red-hot stones were thrown.

[231] The only domesticated animal of the Itel'mens was the dog. Later,
[199] harness dog-breeding of the so-called Eastern Siberian type developed
[493] in Kamchatka. However, until the middle of the 19th century, the Itel'mens used their ancient sled with two pairs of arched staves and a saddle-like
[481] seat. At the time of Krasheninnikov's visit, the Itel'mens had gliding skis, but used mostly woven snowshoes. River navigation was by bat—narrow
[501] boats, hollowed out of whole poplar trunks. For stability and greater carrying capacity, two of these boats were sometimes tied together and
[461] covered to make a platform. Krasheninnikov reports that it took the Itel'mens three years to make a bat with a stone adze.

[361] The Russians called the Itel'men villages in the 18th century ostrozhkas,
[342] or "little forts." They were situated along river banks and consisted of winter and summer dwellings. The winter dwelling was a semiunderground yurt, as it was then called by the Russians, with an entrance through the smoke-opening in the roof. The dwelling also had a side exit, but this was used only by women and children. The summer dwelling of the individual family was the so-called balagan—a pyramidal, grass-covered tent set
[241] on high platforms resting on piles. The ancient dress of the Itel'mens
[171] resembled Koryak and Chukchi dress.

Such, in its general features, was the material culture of the Itel'mens in the beginning of the 18th century. Analogous to the low level of material production were the primitive forms of social relations.

000 ſuperior, joined our little troop, and we embarked upon *baidars**, in order to croſs the bay and reach Paratounka, where we were to be ſupplied with horſes to proceed on our route.

In five or ſix hours we arrived at this oſtrog, where the prieſt †, or rector of the diſtrict reſides, and whoſe church alſo is in this place ‡. His houſe ſerved us for a lodg-

ing,

abode there, and prove to him that the Engliſh are not the only foreigners intereſted in his ſorrowful lot.

501 * *Baidars* are boats ſomewhat ſimilar to European ones, except that the ſides are made of planks from four to ſix inches wide, and faſtened together with withies or cords; and that they are caulked with moſs. The baidars are the only veſſels made uſe of to ſail to the Kurilles iſlands; they are commonly rowed, but will admit of a ſail.

† His name is *Feodor Vereſchaguin*; he ſucceeded his eldeſt brother Romanoff Vereſchaguin, who ſhewed ſo many civilities to captain Clerke, and whom I afterwards found at Bolcheretſk.

‡ His predeceſſor had informed the Engliſh that this pariſh was to be immediately transferred to the oſtrog of St. Peter

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 of bears, who are attracted by the fish with which these rivers abound. The inhabitants assured me, that fifteen or eighteen were frequently seen together upon these banks, and that whenever they hunted them, they were sure to bring back one or two, at least, in the space of twenty-four hours. I shall soon have occasion to speak of their chace, and their weapons.

133
501 We quitted Paratounka and resumed our journey; twenty horses sufficed for ourselves and our baggage, which was not considerable, M. Kasloff having taken the precaution of sending a great part of it by water, as far as the ostrog of Koriaki. The river Avatscha has no tide, and is not navigable farther than this ostrog; and not at all indeed, except by small boats, called *batts*. The baidirs only serve to cross the bay of Avatscha, and can proceed no farther than the mouth of the river, where

7:Lesseps T-3 (1787-88)1790 Kamchadal

133 their lading is put into these batts, which,
501 from the shallowness and rapidity of the water, are pushed forward with poles. It was in this manner our effects arrived at Koriaki.

000 As to ourselves, having crossed the river Paratounka at a shallow, and winded along several of its branches, we left it for a way that was woody and less level, but which afforded us better travelling; it was almost entirely in valleys, and we had only two mountains to climb. Our horses, notwithstanding their burthens, advanced very briskly. We had no reason to complain of the weather for a single moment; it was so fair, that I began to think the rigour of the climate had been exaggerated; but shortly after, experience too well convinced me of its truth, and in the sequel of my journey, I had every reason to accustom myself to the most piercing frosts, too happy when

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 entirely the view of it. The inhabitants of the country, whom I interrogated upon the ſubject, informed me we had juſt paſſed a bay of no very conſiderable width, and that the ſea was covered with ice as far as thirty werſts from the land.

361 At Khaluli, an oſtrog, ſituated upon a river of the ſame name, ſixty ſix werſts from Ouké, and at a ſhort diſtance from the ſea, I found but two yourts and twelve or thirteen balagans; but I had the pleaſure
281 of ſeeing a baidar covered with leather.
501 This boat was about fifteen feet long and four wide; the hull was made of planks tolerably thin, and croſſing each other; a longer and thicker piece of wood ſerved as the keel; the timbers were made faſt with leathern ſtraps; and the whole was covered over with ſeveral ſkins of ſea horſes and large ſea wolves.

7:Lesseps T-3 (1787-88)1790 Kamchadal

281 501 I particularly admired the manner in which theſe ſkins were prepared, and the compactneſs with which they were ſewn together, ſo that the water could not penetrate into the boat. Its ſhape was ſomewhat ſimilar to ours, but leſs round, and therefore leſs graceful; it converged towards the extremities, ſo as to terminate in a point, and had a flat bottom. The lightneſs of the common baidars, which makes them liable to be overturned, doubtleſs gave riſe to this mode of conſtructing them, by which they acquire more weight. This boat was placed under a ſhed built on purpoſe to protect it from the ſnow. The toyon of Khaluli having given up his yourt to us, we ſlept in it, being unable to proceed till the next day. The wind had increaſed ſince our arrival, and did not abate till the middle of the night.

000 At ten o'clock in the morning we had loſt ſight

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared to be teeming with salmon. Stari-ostrog, situated on the right
251 bank, consists of ten huts and a large number of fish-drying sheds.
262 The long Kamschatkan winters, during which it is difficult to
361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

CHAPTER VII.

000 KAMSCHATKA (*continued*).

We begin the river journey—Our rafts—Bad weather—Werchni Kamschatka—Melcova—A fish curral—Replenish our stores—Melcova church—*Kubiankas* and *parkas*—Extortionate demands of the natives—Curious marl cliffs—Mashura—Rows with the people—Leprosy—Piles of driftwood—Onset of the cold weather—Tschappina—We sight the great volcanoes—Our camp-life—Wild fruits—Renewed quarrels with the natives—An awkward dilemma—We win the game.

157/576 On the morning of September 1st our horse-boys departed on their return journey to Petropaulovsky. Whether it is owing to the depression peculiar to the country, so enlarged upon by Kittlitz, I cannot say, but there seems to be an utter lack of geniality among these people. They took their wages resignedly, and bade us an unceremonious adieu. Handshaking—the kindly custom in Scandinavia and other nothern countries on the termination of an engagement between master and man—appears to be unknown in Kamschatka. Perhaps after all it was better, for I do not suppose that any of us felt any great degree of affection for Vodki, and at a later period of our journey, fist-shakings would have better expressed our feelings towards the greater proportion of the people with whom we were brought in contact.

Having despatched a letter to the yacht with instructions as to the date of departure for the rendezvous at the mouth of the river, we went down to the stream to make the necessary preparations for our voyage. The only species of boat used in the interior of the country is the dug-out canoe,—a clumsily-shaped craft made

322/501

22: Guillemard T-2 (1882) 1886 Kamchadal

322 from the trunk of the *topoyina* or poplar-tree. They are generally
501 about twenty-five or thirty feet long, by two feet in beam and depth, and are made to a great extent by burning out the interior of the tree-trunk selected, the finishing only being done by means of axes. We were able to procure five of these boats, and by their aid constructed two rafts in the following manner. We lashed three together side by side, with an interval of about one foot between each, taking care to place the weakest in the middle, and on this foundation placed a platform of poles and axe-hewn planks amidships, for a length of twelve or fourteen feet. Over this platform we constructed a rough shelter-hut, with a birch-bark roof sloping away behind, and the back and sides composed of water-proof sheets which could easily be furled or removed when necessary. The other raft, which carried Louis, Cook, and our two hunters, was made in the same way, but without the hut; and owing to its having but two canoes as a foundation, was laden fully up to where its Plimsoll-mark should have been. Our natives sat at the head and stern of each canoe, wielding paddles with a spade-like handle. They were also provided with poles, the use of which, wherever the river was sufficiently shallow, they seemed greatly to prefer. Shortly before noon our preparations were completed, our men waved their adieux to the remaining three-fourths of the inhabitants of Sherowmy, and pushing out into mid-stream, we began our descent of the river.

PADDLE.

133 Immediately below the settlement the branches of the Kams-
136 chatka reunite to form a stream nearly as wide as the Thames at Hampton Court, but scarcely more than a foot or two in depth. The current is rather swift, but without rapids, and the only dangers to be apprehended are the snags beneath the surface of the water. In the upper part of the river there are not many, but, lower down, the tremendous freshets which occur on the

22: Guillemard T-2 (1882) 1886 Kamchadal

000 Long before the huge paw had descended in a futile effort at revenge the little rascal was safely under cover, on the look-out for another opportunity, and the bear might just as well have attempted to catch a mosquito. A more thorough little pickle never existed, but, like all pickles, he was very popular, and when one morning he disappeared never to return there was great lamentation among our men. We never learnt his fate. Probably Misky had caught his tormentor after many months of vain endeavour, and had dined off him.

We left Petropaulovsky on September 26th with the intention of visiting the coast towards Cape Lopatka. Even as far south as Avatcha Bay the nights had become bitterly cold, and warned us to take our departure if we meant to avoid the heavy gales that visit these latitudes at the onset of winter. We steamed out of the harbour over a sea so calm that the glare of golden light which lit up the western sky was reflected in its surface as in a mirror. Never had the bay and its grand volcanoes looked more beautiful, and we stood watching the blaze of colour fading over the yellow birch-clad hills and the lonely pyramids of snow beyond until the last ray of daylight had disappeared and the full moon had turned the landscape to a harmony in black and silver.

361 Next morning a thick fog hid the coast from view, but cleared
133 as the sun got up, and we were able to pick up our position. About
501 noon we found ourselves off an island abreast of the Itterna Volcano, and steaming into a bay close by, we scanned the coast for signs of a sea-otter-hunters' village, of whose existence we had heard through Afanasi. Not a trace of it was to be seen, and we were beginning to think that we had misinterpreted our directions when a couple of little canoes shot out from behind a point and paddled towards us at a great rate. As these neared the ship we saw that they were built somewhat on the model of a Greenlander's *kayack*, although not broader than the narrowest of Thames cedar-wood canoes. How they can live in any ordinary sea is little short of miraculous, but we afterwards learnt from the people that two

22: Guillemard T-2 (1882) 1886 Kamchadal

501 or three boats invariably proceed in company when engaged in
133 hunting the sea-otter, and that during heavy weather they
361 lash them together with the paddles, by which means even a moderate gale can be safely encountered.

The natives piloted us into a small bay which, protected as it was by an island[1] and a long reef running out from the mainland, afforded fairly good shelter in all winds. At the head of it stood the village, almost invisible at a little distance, composed entirely of underground yourts, whose smoke-begrimed interiors were not inviting to a European.
224 We had hoped to find many skins of the sea-otter here, but
411 were disappointed, the whole village only producing two; we became possessors, however, of what, though less valuable, was of more interest,—the bow and arrows with which these animals are killed. The former is a tough piece of wood five or six feet in length, which is enormously strengthened by a band of plaited hide on the outer face, so tightly fixed as to give the bow when unstrung a curve in the opposite direction. The arrows are of wood for three-quarters of their length, fitted with feathers attached diagonally along the shaft, so as to produce a rotatory motion. The remaining portion is of walrus ivory, provided at the end with a socket, into which a barbed copper point is inserted. This is connected to the arrow by a long string of plaited sinew wound around the shaft. When the otter is hit, the barb, which is very loose, becomes at once detached, and if the animal gain the sea, its whereabouts is revealed by the arrow floating above it.

SEA-OTTER ARROW.

501 The canoes used by these people are of extremely graceful shape, and so light that they can be lifted in one hand with ease. They are constructed of a wooden skeleton

[1] This island, which is not marked in the chart, was named by us after Lieut. R. ff. Powell. It is in Lat. 51° 33′ N., Long. 157° 50′ E., and is about two miles in length. The coast at this part is placed too far to the eastward.

22: Guillemard T-2 (1882) 1886 Kamchadal

501 framework of the slightest possible description, covered with the skin of the Sea-Lion (*Eumetopias*), beautifully sewn. The circular opening for the occupant is very small, and the ingress of water is prevented by a sack-like skin apron which is tightly tied beneath the arms. These craft are astonishingly crank, so much so that one of our party, by no means a tyro in such matters, found the greatest

OTTER-HUNTER'S CANOE, POWELL ISLAND.

possible difficulty in sitting one, even in smooth water. They are made in three sizes,—for one, two, or three persons.

000 We entered into negotiations for the purchase of one of these boats, as well as our want of a common language permitted. Vodky —the curse of Kamschatka—was the one idea of the natives, and we might doubtless have bought the craft, furnished with bow and arrows and all necessary gear, for three or four bottles of this spirit, had we felt inclined, for these people would sell their very souls for brandy were they only marketable commodities. The bargain was concluded eventually for thirty roubles, but though the dealing in money saved our consciences, it probably came to much the same in the end as if we ourselves had supplied the natives with spirit. Directly the snow was sufficiently hard for sledging, the owner of

225 three ſea lions are a great load for their boats; and, as it is
502 eſteemed diſhonourable to leave any game which they have caught, they ſometimes ſo overload their boats, that, though they are very expert in the management of them, they and their game go to the bottom together. In theſe veſſels they go to the deſert iſland *Alaide*, which lies out at ſea about thirty miles, and are ſometimes carried four, five, and even eight days without ſeeing any land, expoſed to the cold of theſe climates; and without any compaſs, they return to their habitations by obſerving the ſun or moon.

237 Of the ſkins of the ſea lion they make cords, ſhoe-ſoles, and
136 ſhoes. The female has two, three, and ſometimes four young ones. They couple in the months of *Auguſt* or *September*; and are pregnant about ten months, as they generally bring forth their young about the beginning of *July*. The male treats the female with great tenderneſs, not like the ſea cat, but by fondneſs endeavours to gain her affection. Both male and female ſeem to take very little care of their young, frequently ſtifling them under their paws as they ſuck; nor do they ſhew
136 any concern at ſeeing them killed before their eyes. The young are not lively nor full of play, like moſt other young animals, but are almoſt continually aſleep. Towards the evening the male and female ſwim out to ſea with their brood, but not far from the ſhore. The young climb upon the mother's back, and reſt themſelves; the male in the mean time playing about toſſes the lazy puppies into the water, to oblige them to learn to ſwim. Some of them have been thrown into the ſea, but inſtead of ſwimming away they haſten again to land. They are twice as large as the young of the ſea cat. Although theſe animals naturally run from a man, yet it has been obſerved that they are not always ſo wild; particularly when their young have ſcarcely learned to ſwim. Mr. *Steller* lived ſix days in a high place amongſt whole herds of them, and out of his hut ſaw

ſeveral

22: Guillemard T-2 (1882) 1886 Kamchadal

000 onlooker it would seem as if we were deliberately beaching the vessel. "Starboard! hard a-starboard!" comes the order. "'Ard a-starboard," echoes the man at the wheel. "Hard a-port!" "'Ard a-port it is," he sings out, clawing the wheel towards him with foot and hand. "Well! I'm blessed if ever I see the likes of this 'ere place," I hear Jack mutter as we are safely berthed, and, on the whole, I am very much inclined to agree with him.

505 Our arrival created no little excitement among the inhabitants of this remote little spot: it might possibly have created even more had we not entered the harbour almost at the moment of departure of the yearly fur steamer for Japan *viâ* Okhotsk. All Petropaulovsky had assembled to wave their adieux, and not a few of them appeared torn by the conflicting desires of seeing the last of their friends and of discovering the business of the new-comers.
161 The steamer was hardly under way before we were receiving our
361 visitors. They were but limited in number. Petropaulovsky, in
342 spite of the imposing letters to which it is treated in the maps, is, after all, little more than a hamlet, and is probably stationary, if not actually decreasing, with regard to population. Clerke, in 1779, found the settlement consisting of thirty huts built upon the sand-spit to which I have already alluded, and consisting mostly of yourts or balagans.[1] Captain Cochrane, who in 1821 performed the unprecedented feat of walking across Siberia from Russia to Kamschatka, describes it as having increased to fifty-seven buildings, some of which were on the mainland; and at the period of the Crimean war it appears to have been as large as it is at the present time, if not actually larger. The town had been transferred to the head of the little harbour, where it now stands, and boasted of no less than two hundred edifices of all kinds. But in Kamschatka, as in other northern countries, winter storehouses, fish-drying sheds, and other out-buildings are so numerous, that the actual dwelling-

[1] A yourt is a semi-subterranean winter dwelling, roofed with turf. The balagans are only used in summer: they are rough wooden buildings erected on piles. The upper part serves as the dwelling-house, while, beneath, the salmon are hung up in rows to dry.

22: Guillemard T-2 (1882) 1886 Kamchadal

Every year the port is visited by a
439 Russian cruiser, and, if her officers should chance to be as excellent
505 companions as I have on every occasion found those with whom I have been brought into contact, a traveller might possibly get the offer of a passage, which, if he has command of the French language, a strong head, and an unlimited capacity for sweet champagne, should be enjoyable enough. A steamer, or steamers, belonging to the Alaska Commercial Company make two voyages annually to the port, to ship the furs awaiting them there and at Bering Island. They start from Yokohama, and it would no doubt be possible to obtain a passage. On leaving Kamschatka for the second time, however, these ships do not return south, but proceed direct to San Francisco.

136 The weather upon our arrival was pleasant and invigorating
226 to a degree; the days absolutely hot, with a brilliant sun and
241 wonderfully clear atmosphere, and the nights cold, but bright. But for the mosquitoes nothing could have been more enjoyable. These pests, which render life in a northern climate almost unbearable during the summer, were not very numerous in Petropaulovsky itself, but in some parts of Avatcha Bay we found them abundant, while in others not one was to be seen. As every one knows, the presence of these insects is almost always dependent on the existence of marsh, low-lying ground, or clumps of birches and other trees in the neighbourhood; but here, oddly enough, we found no such reasons to account for their erratic distribution. The little gardens of the settlement were aglow with bright flowers, though choked with weeds and coarse grass. But little cultivation was to be seen; a few patches of potatoes, cabbages, and such like garden produce, surround the cottages here and there, but there are no cereals. Rye ripens in some parts of the valley of the Kamschatka River, and would probably do so here, according to Dr. Dybowski, but its growth is not attempted. To the Kamschatkan the harvest of the river and the sea is an affair of such supreme importance, and demands so much of his time, that he has but little leisure for agriculture even if he had the inclination.

paid in furrs of different ſorts. In fine, the exchange of goods 563
with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, not- 441
withſtanding all expences occaſioned by the diſtance, dearneſs of
tranſport, and other difficulties, we may reckon that a 1000
rubles will produce 4000, provided they remain but one year in
Kamtſchatka; but if they remain longer, there is a conſiderable
loſs. The reaſons of this are, firſt, that upon their arrival, being
flattered with the high prices of things, they ſell every thing, even
their own cloaths and proviſions, hoping ſoon to leave the country,
in which if diſappointed, they are obliged to buy them back
again at double price: ſecondly, that the furrs by lying, loſe their
colour and value: thirdly, that the place is exceſſively expenſive
in regard to lodging, warehouſe-room, victuals, and ſeveral other
particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce 439
of *Ruſſia*, are *European* goods, from *Siberia*, *Boharia*, and the
Calmuks. From *Europe* they receive coarſe cloaths of various
colours, linen, ſerges, knives, ſilk and cotton handkerchiefs,
red wine, a little ſugar, tobacco, and ſeveral toys. From
Siberia, iron, ſeveral iron and copper veſſels, and inſtruments,
ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp,
yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth.
From *Boharia*, and the country of the *Calmuks*, they bring ſe-
veral different ſorts of cotton goods. From *China*, ſeveral ſilk
and cotton ſtuffs, tobacco, coral, and needles, which are much
preferred to thoſe from *Ruſſia*. From the *Koreki* they receive
great quantities of rein-deer-ſkins, both dreſſed and undreſſed,
which they may ſell in what quantities they pleaſe at any
time. Merchants muſt take care not to have too great a ſtock 437
of any other goods; for the inhabitants of this place, *Ruſſians* 511
as well as natives, never buy any thing before they are in abſolute
want of it, even if they could buy it at half price.

The

7:Lesseps T-3 (1787-88)1790 Kamchadal

342 of thatch, or dried grafs, placed upon long
354 poles faftened together at the top, and bear-
511 ing upon the rafters. This is at once the
417 firft and laft ftory; it forms the whole apartment, or rather chamber: an opening in the roof ferves inftead of a chimney to let out the fmoke, when a fire is lighted to drefs their victuals; this cookery is performed in the middle of the room, where they eat and fleep pell-mell together without the leaft difguft or fcruple. In thefe apartments, windows are out of the queftion; there is merely a door, fo low and narrow, that it will fcarcely fuffice to admit the light. The ftair-cafe is worthy of the reft of the building; it confifts of a beam, or rather a tree jagged in a flovenly manner, one end of which refts on the ground, and the other is raifed to the height of the floor. It is placed at the angle of the door, upon a level, with a kind of open gallery that is erected before it. This tree

retains

7:Lesseps T-3 (1787-88)1790 Kamchadal

356 another, in my opinion, much more fetid, and which I never could endure; it is the nauſeous exhalation from the dried and ſtinking fiſh, when it is preparing, when they are eating it, and even after it is eaten. The refuſe is deſtined for the dogs; but before the poor animals get it, every corner of the room has been ſwept with it.

511 The perſons who inhabit theſe dwellings exhibit a ſpectacle equally diſguſting. Here is a group of women, ſhining from the fat with which they ſmear themſelves, and wallowing on the ground amidſt a heap of rags; ſome of them ſuckling their children, who are half naked, and bedaubed with filth from head to foot; others devouring with them ſome ſcraps of fiſh perfectly raw, and frequently putrid. There we ſee others in a diſhabille that is not leſs filthy, lying upon bear's ſkins, chattering to one another, and frequently altogether,

and

7: Lesseps T-3 (1787-88) 1790 Kamchadal

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

* Some of the yourts which I ſaw were floored with planks; but this is regarded as a luxury, and the generality have no other floor than the ground.

corner

7:Lesseps T-3 (1787-88)1790 Kamchadal

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

the worst roads, and to free themselves very often overturn their driver. 484

The best travelling is in the month of *March* or *April*, when the snow is turned hard or frozen a little at top; however, there is still this inconvenience attending it, that sometimes travellers are obliged to lodge two or three nights in desert places; and it is difficult to prevail upon the *Kamtschadales* to make fire either for warming themselves or dressing victuals, as they and their dogs eat dried fish, and find themselves so warm wrapt in their furs that they want none; nay, it is surprising to see all the people of this climate bearing the cold so well, that after having slept a whole night very sound they awake next morning as refreshed and alert as if they had lain in the warmest bed. This seems to be so natural to all here, that I have seen some of them lie down with their backs uncovered against a fire, and notwithstanding the fire has been burnt out long before morning, yet they continued to sleep on very comfortably, and without any inconvenience. 484 147 513 147

CHAP. X.

Of the Kamtschadales' *Method of making* WAR. 721

ALTHOUGH before they were conquered by the *Russians*, the *Kamtschadales* did not seem to have had any ambition of increasing their power, or enlarging their territories, yet they had such frequent quarrels among themselves that seldom a year passed without one village or other being entirely ruined. The end of their wars was to take prisoners, in order

7:Lesseps T-3 (1787-88)1790 Kamchadal

Those of winter are less singular; and if equally large, would exactly resemble the habitations of the Russian peasants. These have been so often described, that it is universally known how they are constructed and arranged. The isbas are built of wood; that is to say, the walls are formed by placing long trees horizontally upon one another, and filling up the interstices with clay. The roof slants like our thatched houses, and is covered with coarse grass, or rushes, and frequently with planks. The interior part is divided into two rooms, with a stove placed so as to warm them both, and which serves at the same time as a fire-place for their cookery. On two sides of the largest room, wide benches are fixed, and sometimes a sorry couch made of planks, and covered with bears skin. This is the bed of the chief of the family: and the women, who in this country are the slaves of their husbands, and perform all the

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7:Lesseps T-3 (1787-88)1790 Kamchadal

000 to dig a hole in the ſnow, which was in this place at leaſt ſix feet deep; others fetched wood, and a fire being quickly lighted, the kettle was ſet on. A light repaſt, and a ſmall dram of brandy, ſoon recovered all our company. As the night approached, we were employed upon the means of paſſing it in the leaſt uncomfortable manner. Each prepared his own bed: mine was my vezock, where I could lie down at my eaſe; but except M. Kaſloff, there was no other perſon who had ſo convenient a carriage. How, ſaid I to myſelf, will theſe poor crea-
513 tures contrive to ſleep? I was ſoon relieved from my anxiety on their account. The manner in which they prepared their beds, deſerves to be mentioned, though they did not obſerve much ceremony on the occaſion. Having dug a hole in the ſnow, they covered it with the branches of trees, the ſmalleſt they could get; then wrapping themſelves up in a *kouklanki*, with the hood drawn over their

513 their heads, they lay down on their bed as if it were the beſt in the world. As to our dogs, they were unharneſſed, and tied to the trees that were near us, where they paſſed the night in their uſual manner.

The wind having conſiderably abated, we proceeded on our journey before it was light. We had thirty werſts to Ozernoï, where it had been our intention to have ſlept the preceding evening. We arrived at ten o'clock in the morning, but our dogs being extremely fatigued, we were obliged to ſpend the reſt of the day, and even the night there, in hopes that the wind, which began to blow ſtill more violently in the afternoon, would ſubſide during the interval.

361 The oſtrog takes its name from a lake that is near it. The river Ozernaïa, which is but ſmall, runs at the bottom of the village.

352 bench is only a foot from the ground *,
511 and commonly ſerves as a bed for a num-
514 ber of families. I have counted in one yourt more than twenty perſons, men, women, and children. They eat, drink, and ſleep pell mell together, ſatisfy all the calls of nature without reſtraint or modeſty, and never complain of the noxious air that
354 prevails in theſe places. It is true there is
353 a fire almoſt inceſſantly. The fire-place is commonly either in the middle of the yourt or againſt one of the ſides. In the evening they rake the coals in a heap, and ſhut the entrance of the yourt, where the ſmoke ſhould evaporate; and thus the heat is concentrated, and kept up during the whole night. By means of a diſmal lamp, the form and diſagreeable ſmell of which I have before deſcribed, we diſcover in one

* Some of the yourts which I ſaw were floored with planks; but this is regarded as a luxury, and the generality have no other floor than the ground.

corner

Nothing plagues the natives in their huts ſo much as the lice and fleas; the 136 women ſuffer moſt from the former, by wearing very long, 515 and ſometimes falſe hair. Mr. *Steller* was told, that near the 302 ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them.

It is remarkable that in *Kamtſchatka* there are neither frogs, 136 toads, nor ſerpents. Lizards, indeed, are numerous enough, which 825 the natives look upon as ſpies ſent from the infernal powers for 787 information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others.

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
same dish with the dogs, which they never wash; every thing
264 about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

962 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
their natural lusts and appetites; these incline them to singing,
517 dancing, and relating of love stories Their greatest unhappiness
554 or trouble is the want of these amusements: they shun this by all
157 methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

000 consisted of myself, Mrs. Jochelson as assistant and physician to the party, and eleven laborers, of whom seven were Russians, three Kamchadals and one Japanese.

133 The Osernaya River, with its slanting bed, rocky banks, rapid falls and curves, forms a most difficult and dangerous route of travel. We had two boats and two canoes. One of the boats was for Mrs. Jochelson and myself; the other carried the tents, instruments, food and other supplies. The canoes served for reconnaissance and errands requiring despatch. It was very difficult to make progress on the turbulent river, particularly on the way up. Several times we had to disembark and carry our freight on our shoulders, while the boats were pulled by ropes through the rapids. (See Plate 5, figs. B, C.)

136 While there are no human habitations anywhere in the country, we were amazed to find well-beaten paths in the forests and on the mountains above the river, as if there were numerous human settlements. But realizing that these were roadways made by bears, we walked cautiously amid the dense vegetation with rifles ready for action. We did not see any bears while following these paths, but we heard the breaking and cracking of bushes and tree branches, and on the ground we found pieces of fresh salmon, the remnants of the bears' meals. The animals are very nervous and easily become alarmed. They have sufficient reason to be afraid of a man with a gun.

It is well known that at Lake Kuril and in its vicinity scores of bears are to be found. The abundance of fish and of many kinds of berries furnishes them ample food and favors their increase in number. The sparsity of human population is also favorable to the multiplication of the bears, although the few hunters of the coastal villages annually kill them by the hundreds.

133 After five days of painful effort we finally reached our destination. It was a windy day and our frail boats nearly capsized on the stormy lake, which is sur-
● 515 rounded by the peaks of extinct volcanoes and by steaming hot sulphurous springs,
757 the temperature of which reaches 100° C. (210° F.) and more. From our boat we observed steaming springs on the banks of the Osernaya when nearing the lake, but we had no time to stop to investigate them. We were told that the Kamchadal from Yavino and the Russians from Osernaya dig pits by the hot springs for bathing and curing different diseases. The temperature in these baths is reduced to 50° or 40° C.

136 From the head of the Osernaya River I directed my fleet to the Siwusk Cape (see map of Kuril Lake and Plate 5, fig. a). While excavating there we were entertained every day by the sight of bears fishing and gathering berries, particularly when we increased our field of observation by the use of opera glasses. The bears stood with their hind legs in the mountain rivers and creeks, and with their front paws managed to throw out on the banks the sea salmon, which in order to spawn ascend the rivulets that flow into the lake. The bears went after their prey and eating off the heads and spines, which are the most palatable parts of the fish, cast away the remainder. Their movements, turning, leaping and jumping, were so amusing that we could not restrain our laughter.

361 conſideration were not provided with a church.

361 The next day we mounted our horſes
515 and took the way to Natchikin, another oſtrog in the Bolcheretſk route. We were to ſtop a few days in the neighbourhood for the ſake of the baths, which M. Kaſloff had conſtructed at his own expence, for the benefit and pleaſure of the inhabitants, upon the hots ſprings that are found there, and which I ſhall preſently deſcribe. The way from Koriaki to Natchikin is tolerably commodious, and we croſſed without difficulty all the little ſtreams that fall from the mountains, at the foot of which we paſſed. About three-fourths of the way we met the Bolchaia-reka*; from the ſite of its greateſt breadth, which in this place is about ten or twelve yards, it appears to wind to a conſiderable extent to the north eaſt; we jour-

* A Ruſſian name which ſignifies, *large river.*

neyed

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 neyed on its bank for ſome time, till we
came to a little mountain, which we were
obliged to paſs over in order to reach the
village. A heavy rain which came on as
we left Koriaki, ceaſed a few minutes after;
but the wind having changed to the north-
weſt, the heavens became obſcured, and we
had abundance of ſnow; we were about
two-thirds of our way, and it continued till
361 our arrival. I remarked that the ſnow al-
515 ready covered the mountains, even ſuch as
were loweſt, upon which it deſcribed an
equal line at a certain elevation, but that
below them no traces of it were yet per-
ceptible. We forded the Bolchaia-reka,
and found on the other ſide the oſtrog of
Natchikin, where I counted ſix or ſeven
iſbas and twenty balagans, ſimilar to what
I had ſeen before. We made no ſtay there,
M. Kaſloff thinking it proper to haſten im-
mediately to the baths, to which I was in-

515 clined as much from curiosity as from necessity.

000 The snow had penetrated through my clothes, and in crossing the river, which was deep, I had made my legs and feet wet. I longed therefore to be able to change my dress, but when we came to the baths our baggage was not arrived. We proposed drying ourselves by walking about the environs, and observing the interesting objects which I expected to find there. I was charmed with every thing I saw, but the dampness of the place, added to that of our clothes, gave us such a chilliness that we quickly put an end to our walk. Upon our return we had a new source of regret and impatience. Unable either to dry ourselves or change our dress, our equipage not being arrived, to complete our misfortune, the place to which we had retired was the dampest we could have chosen, and though it

000 it ſeemed ſufficiently ſheltered, the wind penetrated on every ſide. M. Kaſloff had recourſe to the bath, which quickly reſtored him; but not daring to follow his example, I was obliged to wait the arrival of our baggage. The damp had penetrated to ſuch a degree that I ſhivered during the whole night.

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The next day I made a trial of theſe baths, and can ſay that none ever afforded me ſo much pleaſure or ſo much benefit. But before I proceed, I muſt deſcribe the ſource of theſe hot waters, and the building conſtructed for bathing.

They are two werſts to the north of the oſtrog, and about a hundred yards from the bank of the Bolchaia-reka, which it is neceſſary to croſs a ſecond time in order to arrive at the baths, on account of the elbow which the river deſcribes below the village. A thick and

[Natchikin (Nachiki?)--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

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and continual vapour aſcends from theſe waters, which fall in a rapid caſcade from a rather ſteep declivity, three hundred yards from the place where the baths are erected. In their fall, which is in a direction eaſt and weſt, they form a ſmall ſtream of a foot and half deep, and ſix or ſeven feet wide. At a little diſtance from the Bolchaia-reka, this ſtream is met by another, with which it pours itſelf into this river. At their conflux, which is about eight or nine hundred yards from the ſource, the water is ſo hot that it is not poſſible to keep the hand in it for half a minute.

M. Kaſſoff has been careful to erect his building on the moſt convenient ſpot, and where the temperature of the water is moſt moderate. It is conſtructed of wood, in the middle of a ſtream, and is in the proportion of ſixteen feet long by eight wide. It is divided into two apartments, each of ſix

or

7:Lesseps T-3 (1787-88)1790 Kamchadal

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or ſeven feet ſquare, and as many high: the one which is neareſt to the ſide of the ſpring, and under which the water is conſequently warmer, is appropriated for bathing; the other ſerves for a dreſſing-room; and for this purpoſe there are wide benches above the level of the water; in the middle alſo a certain ſpace is left to waſh if we be diſpoſed. There is one circumſtance that renders theſe baths very agreeable, the warmth of the water communicates itſelf ſufficiently to the dreſſing-room to prevent us from catching cold; and it penetrates the body to ſuch a degree, as to be felt even for the ſpace of an hour or two after we have left the bath.

We lodged near theſe baths in a kind of barns, covered with thatch, and whoſe timber work conſiſted of the trunks and branches of trees. We occupied two, which had been built on purpoſe for us, and

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 The various conſtructions which M.
515 Kaſloff ordered for the greater convenience
757 of his eſtabliſhment, detained us two days
823 longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of diſ-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

476 bours, which is no ſmall proof of their zeal
157 to oblige, if we conſider the natural and ex-
461 treme ſlothfulneſs of their diſpoſition. An
515 active life would be inſupportable to them; and the greateſt happineſs, in their eſtimation, next to that of getting drunk, is to have nothing to do, and to live for ever in tranquil indolence. This is carried ſo far with theſe people, as frequently to make them neglect the means of providing the indiſpenſable neceſſaries of life; and whole families are often reduced to all the ſeverities of famine, becauſe they would not take the pains of providing in ſummer a reſerve of fiſh, without which they are unable to live. If they neglect in this manner the preſervation of their exiſtence, it is not to be ſuppoſed that they are more attentive to the article of cleanlineſs; it diſplays itſelf neither in their perſons, nor their habitations; and they may juſtly be reproached for being addicted to the contrary

7:Lesseps T-3 (1787-88)1790 Kamchadal

515/157 trary extreme. Notwithſtanding this careleſſneſs, and other natural defects, it muſt be regretted that their number is not more conſiderable; as, from what I have ſeen, and what has been confirmed to me by different perſons, if we would be ſure of finding ſentiments of honour and humanity in this country, it is neceſſary to ſeek for them among the true Kamtſchadales; they have not yet bartered their rude virtues for the poliſhed vices of the Europeans ſent to civilize them.

177/563 It was at Bolcheretſk that I began to perceive the effects of their influence. I ſaw the trace of European manners, leſs in the mixture of blood, in the conformation of features, and the idiom of the inhabitants, than in their inclinations and mode of life, which did not always diſcover any very conſiderable fund of virtue. This ſtriking difference between the inhabitants and

22: Guillemard T-2 (1882) 1886 Kamchadal

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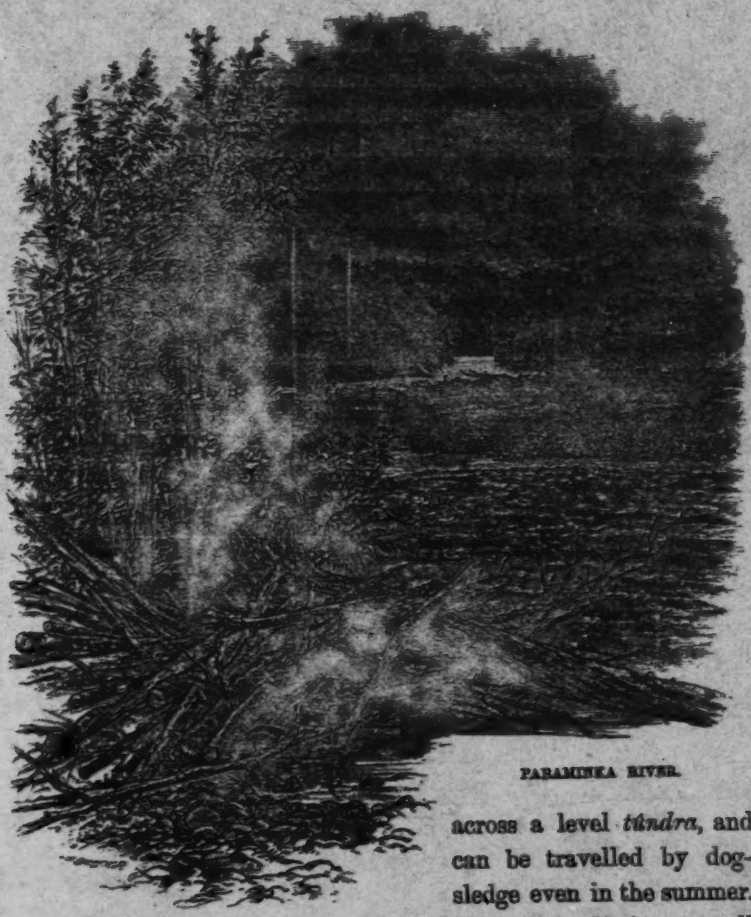
picturesque lake, across which we were conveyed in dug-out canoes to a small village on the opposite shore. From here the road lies



PARAMUSKA RIVER.

across a level *túndra*, and can be travelled by dog-sledge even in the summer. Kluchi itself is a small village composed of a few log-built huts and balagans, but, with its background of the Vilutchinska volcano, is prettily situated. It stands in an open valley, in which some attempts at cultivation are made. The hot springs—the steam from which is visible at some

22: Guillemard T-2 (1882) 1886 Kamchadal

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distance—have a temperature of about 108° Fahr., and appear to be nearly devoid of sulphur. They are much resorted to by the natives for cutaneous and other disorders, and have huts built over them for bathing purposes, thanks to the orders of the Ispravnik. Near the village runs a branch of the Avatcha River, down which our party paddled to the sea; and on arriving at the yacht we were pleased to learn that most of the horses had been brought into the settlement, and that there was every prospect of our starting on our long-planned expedition through the interior in the course of a couple of days.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 sewn together. They admitted enough light, however, to show us the strange mixture of ornament that hung upon the walls. In the corner was the usual tawdry *eikon*, and facing it, a long array of clippings from the "New York Police News," full of the choicest
262 horrors of battle, murder, and sudden death! Amid these lively
136 surroundings we consumed our sour milk and bilberries, and
224 bargained for some potatoes and turnips, which appeared to be
241 grown here in some abundance. Much, no doubt, might be done in the way of agriculture in many parts of the country were it not that the fish-harvest and hunting take up so much of the peasants' time. Of their success in the latter line we had evidence in a fine pair of horns of the Argali or Bighorn,[1] which lay outside the hut, and had only recently been shot. These animals, we were told, are not easily obtained at this season, and do not exist in any great numbers in the neighbourhood; but in the winter they descend to the lower spurs of the mountains, and are more easily brought to
000 bag. We much desired to obtain a head and skeleton of this sheep, but our limited time, and Afanasi's statement that we should be able to get them on the sea-coast about sixty miles to the eastward of Avatcha Bay, eventually decided us on relinquishing the idea of hunting them in this neighbourhood. We were pleased, however, to be able to prove their existence in the interior, which has by some previous writers been doubted.

We pursued our journey in a steady downpour of rain, our track leading through coarse grass and other annual vegetation so thick that from the back of a horse it was utterly impossible to see any trace whatever of the way. Our two hunters had donned their waterproofs,—long coats made from the intestine of the seal, carefully sewn together with sinew. These garments are tolerably strong in a thornless country, and though not ornamental, are as light as a feather, and most effectual in keeping out rain. We
133 passed to the south of some hot springs, about two versts distant from
515 the village, the water of which was said to be of such a temperature

[1] *Ovis nivicola*, Eschscholtz.

[i.e. Narchiki--analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

133 515 that the hand could not be borne in it. Of these, as in Japan, there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet. 322 824 531 The birch is to the inhabitant of northern regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

BIRCH-BARK BOX.

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

There is likewise another creature in these seas resembling a whale, but smaller and slenderer: the *Russians* call it a wolf, and the *Kamtschadales*, chethak. Its fat is of such a nature, that, when swallowed, it presently passes insensibly. The natives sometimes use it as a medicine in case of costiveness, but oftener to play tricks with one another. They feed upon the flesh and tongue, which have not the same quality. 136 278 262 522

Notwithstanding the great plenty of whales upon this coast, the scarcity of food is sometimes so great, that whole villages die of hunger. In the month of *April*, 1739, I saw a melancholy instance of their being obliged, out of necessity, to eat some poisonous whale's fat, at a village upon the river *Berosover*, called *Alaune*, where I observed the people all look pale, as if they had been sick for a long time; when I asked the reason, I was told, that just before my arrival one of the natives was killed by eating of whale's fat; and as all the rest had eat of the same, they dreaded the same fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the physicians there, fastened him with ropes to a ladder, and placed themselves on both sides of him with great clubs in their hands, with which they tossed firebrands out of the huts, and the wife of the sick person coming behind him, made several conjurations over his head, begging death to spare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly surprise me; I rather wondered that such things did not happen oftener, especially from those whales which are killed with poisoned darts. However the *Kamtschadales* think so little of the consequences, that they had rather risk their lives than be deprived of the pleasure of eating whale's fat. 262 755 278

After the whales, we must mention the fish * mokoe, which at *Archangel* is called akula. It is about three fathoms long; 136

* Canis Carcharias Autoris.

brings

his belly, being, as he ſaid, ordered to do it by the muſhroon.

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten.

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms.

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune.

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick

 for

for their diverſion in all their entertainments.

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY
576
261 WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.
576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

better; the *Jakutſki* alſo dig deep pits, in which they lay their fiſh, ſprinkling it with wood aſhes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their troughs, with ſeveral different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink but water: but when they made merry they drank water which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves frequently by throwing handfuls of ſnow into their mouths; and the bridegrooms who work with the fathers of their future brides find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

people, it has been perverted by foolish and ridiculous ceremonies; and this appears the more probable, because that, after their summer or harvest labour is over, they look upon it as a sin to do any work, or make any visits, before this holiday, which if any one neglects he is obliged to expiate it at that time, if not before. From hence we may see that the ancestors of this people were accustomed to offer up the first fruits of their summer labours to God, and to make merry with one another. The northern and southern *Kamtschadales* have different ceremonies in the celebration of their holidays, which are extremely silly, and consist of many ridiculous anticks. I shall give a slight sketch of one of these assemblies in the southern *Kamtschatka*.

After many strange ceremonies they introduce a little bird and a fish, which they roast upon the coals, and divide amongst them, when every one throws his share into the fire as a sacrifice, or an offering, to those spirits which come to their feasts; then they boil dried fish, the broth of which they pour out before their image, and eat the fish themselves; and then take the birch-tree out of the hut, and carrying it to their magazines, lay it up there to be kept for the whole year. Thus ends the festival.

CHAP. XIV.

Of their FEASTS *and* DIVERSIONS.

THEY make feasts when one village entertains another, either upon the account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of opanga, 'till they are all set a vomiting;

7:Lesseps T-3 (1787-88)1790 Kamchadal

262 ſchadales and Ruſſians of this country.
222 When the women go out to make theſe har-
462 veſts for winter conſumption, it is high holy-
527 day with them, and the anniverſary is celebrated by a riotous and intemperate joy, that frequently gives riſe to the moſt extravagant and indecent ſcenes. They diſperſe in crouds through the country, ſinging and giving themſelves up to all the abſurdities which their imagination ſuggeſts; no conſideration of fear or modeſty reſtrains them. I cannot better deſcribe their licentious frenzy than by comparing it with the bacchanals of the Pagans. Ill betide the man whom chance conducts and delivers into their hands! however reſolute or however active he may be, it is impoſſible to evade the fate that awaits him; and it is ſeldom that he eſcapes, without receiving a ſevere flagellation.

Their proviſions are prepared nearly in the

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

325 a needle. The *Japanese* certainly used to come and trade to
439 the *Kurilski* islands, for I found there a *Japanese* sabre, a
172 japanned waiter, and silver ear-rings, which could be brought from no other place.

Of all the curiosities made by these wild people with their stone
321 knives and hatchets, nothing surprised me so much as a chain of
531 whales' bones, found in an empty hut near the *Tchukotskoi* Noss, made of different links as smooth as if they had been turned, about a foot and a half long, and formed out of one tooth. It is very extraordinary that any of these wild people should with nothing but stone instruments have been capable of making so curious a piece of workmanship, which was worthy of the best artist.

501 They have two methods of making their boats; one sort of
171 which is called *koaihtahta*, and the other *tahta*. The former do not differ from our fishermens' boats, except that the prow and stern are higher, and the sides lower. The tahta has the prow and stern of an equal height; the middle is not bent out, but rather falls in, which makes it very inconvenient, especially when there is any wind, as being very soon filled with water. They use the koaihtahta only upon the river *Kamtschatka*, but the tahta in most other places. When any planks are sewed upon the tahta they are called baidars, which are used by the inhabitants upon the *Bobrovoi* or Beaver sea in pursuing the sea animals. They split these baidars, and sewing them with whales' beards caulk them with moss or nettles beat soft. The *Kuriles* of the islands and those that live upon the *Lopatka* build the baidars with a keel, to which they sew planks with whales' beard, and caulk them with moss. In *Kamtschatka* they make their boats of poplar wood only; but the *Kuriles*, having no proper wood of their own, are obliged to make use of what is thrown on shore by the sea, and which is supposed to come from the coast of *Japan*, *America*, or *China*. The northern inhabitants of *Kamtschatka*, the

22: Guillemard T-2 (1882) 1886 Kamchadal

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that the hand could not be borne in it. Of these, as in Japan, there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet.

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The birch is to the inhabitant of northern regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

BIRCH-BARK BOX.

22: Guillemard T-2 (1882) 1886 Kamchadal

322 ornamented with stamped designs, and are occasionally painted, or
531 rather dyed, with blue and white; while the oval shape so commonly seen in Scandinavia is not infrequent. To the European traveller the tree is equally useful. Cups and other articles can be made with the greatest readiness; fires can be lighted in the wettest weather with the thin inflammable bark, and the inner layers of the latter form excellent writing-paper, the characters on which no quantity of rain will injure or render illegible.

133 The scenery some miles north of Narchiki begins to alter in
136 character, an alteration that is distinctly for the better. The monotony of the birch-forests is relieved from time to time by openings where the dense undergrowth is supplanted by little rocky knolls covered with bright mosses. The ground becomes more broken and the open spaces larger, and before long the country approximates closely in character to that which, in Scandinavia, would be designated the lower fjells. We had hitherto shot but little game, but here ptarmigan were abundant,[1] and we were able with ease to secure as many as were necessary for the table. Farther on, we came to a small stream, which was, most probably, an affluent of the Great Bolcheresk River, which debouches into the Okhotsk Sea on the western coast of the peninsula. It was crowded with dead and dying fish; and the remnants of some recently devoured ones upon the bank, together with fresh spoor of bear around them, told us that, in all probability, Bruin was not far off.

I had never before seen the tracks of this animal in such abundance, but farther north it was common enough to see the river-banks as much trampled as if a herd of cattle had been driven down to water. The bears at this season of the year live entirely upon salmon. Later, when this diet fails them, they take to berries, upon which they live until the time of hybernation, which is generally

[1] Probably a sub-species of, or perhaps identical with, the Dal-ryper or Willow Grouse of Scandinavia (*Lagopus albus*). I unfortunately omitted to preserve specimens of this bird until it was too late, and we did not shoot any after we had once begun the river journey.

his belly, being, as he ſaid, ordered to do it by the muſhroon. 276

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten. 276 439

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms. 535

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune. 533 534

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick 536 537

 for

for their diverſion in all their entertainments.

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
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837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

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535 native Kamtſchadales, at which I was alſo

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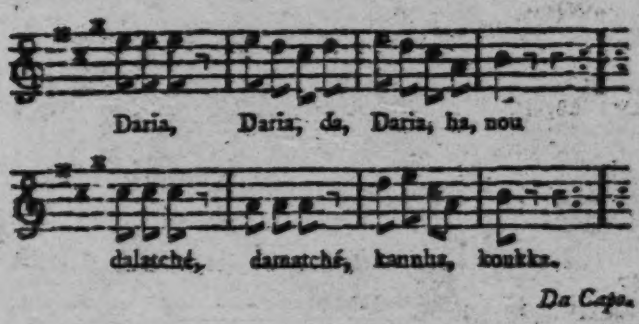

The

7:Lesseps T-3 (1787-88)1790 Kamchadal

533 The words mean,

Daria *, Daria ſings and dances ſtill.

This air is repeated without ceaſing.

535 In their dances they are fond of imitat-
825 ing the different animals they purſue, ſuch as the partridge and others, but principally the bear. They repreſent its ſluggiſh and ſtupid gait, its different feelings and ſituations; as the young ones about their dam; the amourous ſports of the male with the female; and laſtly, its agitation when purſued. They muſt have a perfect knowledge of this animal, and have made it their particular ſtudy, for they repreſent all its motions as exactly, I believe, as it is poſſible. I aſked the Ruſſians, who were greater connoiſſeurs than myſelf, having been oftener preſent at the taking of theſe animals,

* Daria is a female Ruſſian name.

whether

24: Lansdell-639 [3] M-2 (1879) 1882 Kamchadal
116, 181, 533, 535, 825

" The Kamchatdales have not the heroic character of their neighbours the Koriaks. Their plaintive songs do not celebrate battles, but love, sledge travels, fishing, and hunting. In their dances they mimic admirably the movements of animals, bounding like the deer, running like the fox, and even entering the water to swim like the seal."

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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Koutka their new-born children, who, the moment they have left their cradle, are destined to become chamans. The veneration of the inhabitants of this village for sorcerers can scarcely be conceived; it approaches to insanity, and is really to be pitied; for the extravagant and wild absurdities by which these magicians keep alive the credulity of their compatriots, excites our indignation rather than our laughter. At present they do not profess their art openly, or give the same splendour they once did to their necromancy. They no longer decorate their garments with mystic rings and other symbolic figures of metal, that jingled together upon the slightest motion of their body. In like manner they have abandoned the kind of kettle *, which they used to strike with a sort of musical intonation in their pretended en-

* A sort of *tambour de vasque* called *bouben*. It is still in use amongst the Yakoutsk, as will be seen hereafter.

chantments,

[Mashura--analyst]

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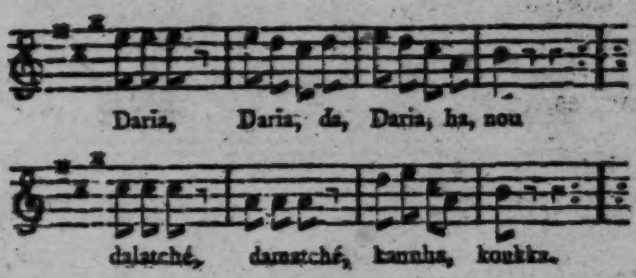

Da Capo.

The

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This air is repeated without ceaſing.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

535/825 whether their pantomime ballets were well executed; and they assured me that the dancers were the best in the country, and that the cries, gait, and various attitudes of the bear, were as accurate as life. Meanwhile, without offence to the amateurs, these dances are, in my opinion, not less fatiguing to the spectators than to the performers. It is a real pain to see them distort their hips, dislocate every limb, and wear out their lungs; to express the excess of pleasure which they take in these strange balls, which, I repeat it, resemble the absurd diversions of savages: the Kamtschadales may indeed, in many respects, be considered as of that rank.

224 Having given an account of the address with which these people counterfeit the postures and motions of the bear, who may be called their dancing master, it may not be unpleasing to relate in what manner they hunt

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 ſky ſeemed to threaten us with a ſecond tempeſt before the end of the day. It began to riſe about two o'clock in the afternoon, and laſted till the evening.

535 To divert our attention, it was propoſed to us to try the abilities of a celebrated female dancer, who was a Kamtſchadale, and lived in this oſtrog. The encomiums beſtowed upon her excited our curioſity, and we ſent for her; but either from caprice or ill humour ſhe refuſed to dance, and paid no regard to our invitation. It was in vain they repreſented that her refuſal was diſreſpectful to the governor general; no conſideration could induce her to comply. Fortunately we had ſome brandy by us, and a bumper or two ſeemed to effect a change in her inclinations. At the ſame time a Kamtſchadale, at our requeſt, began to dance before her, challenging her by his voice and geſtures. Gradually her eyes ſparkled, her coun-

7: Lesseps T-3 (1787-88) 1790 Kamchadal

535 countenance became convulſive, and her whole frame ſhook upon the bench where ſhe ſat. To the enticements and ſhrill ſong of the dancer, ſhe anſwered in ſimilar accents, beating time with her head, which turned in every direction. The movements became at laſt ſo rapid, that, no longer able to contain herſelf, ſhe darted from her ſeat, and in turn defied her man by cries and diſtortions ſtill more extravagant. It is not eaſy to expreſs the abſurdity of the dance. All her limbs ſeemed to be disjointed; ſhe moved them with equal ſtrength and agility; ſhe tore her cloaths, and fixed her hands to her boſom with a kind of rage as if ſhe would tear it alſo. Theſe ſingular tranſports were accompanied with ſtill more ſingular poſtures; and in ſhort, it was no longer a woman, but a fury. In her blind frenzy ſhe would have ruſhed into the fire that was kindled in the middle of the room, if her huſband had not taken the precau-

535 tion of placing a bench before it to prevent her: during the whole dance indeed he took care to keep himſelf cloſe to her. When he ſaw that her head was perfectly gone, that ſhe ſtaggered on all ſides, and could no longer ſupport herſelf without laying hold of her fellow dancer, he took her in his arms and placed her upon a bench, where ſhe fell, like an inanimate clod, without conſciouſneſs, and out of breath. She continued five minutes in this ſituation. Meanwhile the Kamtſchadale, proud of his triumph, continued to dance and to ſing. Recovering from her ſwoon, the woman heard him, and ſuddenly, in ſpite of her weakneſs, ſhe raiſed herſelf up, uttered ſome inarticulate ſounds, and would have begun again this labourous conteſt. Her huſband kept her back, and interceded for her; but the conqueror, believing himſelf to be indefatigable, continued his jeers and bantering, and we were obliged to exert our authority

to

535 to quiet him. In ſpite of the praiſes that were laviſhed upon the talents of theſe actors, the ſcene, I confeſs, afforded me no amuſement, but on the contrary, conſiderable diſguſt.

276 All the inhabitants of this place, women as well as men, ſmoke and chew tobacco. By a refinement that I cannot account for, they mix aſhes with the tobacco to make it ſtronger. We gave them ſome ſnuff, and they applied it not to their noſe, but to their mouth. I examined their pipes: they are of the ſame ſhape as thoſe of the Chineſe, made of bone, and very ſmall. When they make uſe of them, they do not emit the ſmoke from their mouth, but ſwallow it with great gratification.

000 All the toyons of the different oſtrogs we had paſſed in coming from Ozernoi, out of reſpect to M. Kaſloff, had eſcorted us as far

24: Lansdell-639 [3] M-2 (1879) 1882 Kamchadal
116, 181, 533, 535, 825

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28: Sarytschew--66 T-1 (1789-90) 1806 Kamchadal
116, 535, 825

"I did not see the Kamtschadale dance here [CMC: at Bolsheretsk], but among the Kosaks of Petropaulowsk, who give it the preference, it is so indecent, that every modest woman would blush to be a spectator, much more a partner in it. A woman makes the commencement by stepping forward into the middle of the Isba, and holding a cloth spread out before her in a transverse direction. She shifts her feet slowly, making a variety of motions with her hands, head, and body. Her head sinks alternately on one shoulder or the other, on her back or on her breast. She then at length advances to a man, and renews this gesticulation close before him, which implies as much as soliciting his hand to the dance. He accordingly takes hold of the cloth in the same manner, and rising from his seat, they both commence the distortion of all their limbs together. The woman turns every now and then away from the man, but returns to him instantly again, sinking gradually upon her knees, and then bending herself backward with a similar gesticulation; the man also in the mean time falling down and reclining himselv over her, the dance is concluded with the most obscene gestures. While it lasts, both dancers and spectators all sing to one song, consisting of the words an-kelle, an-kaget, incessantly repeated: but they have a variety of such monotonous ditties, adapted to the same species of dancing. In some of their dances, they imitate birds and beasts; the man for example representing the male, and the woman the female-bear; and sometimes there is a company of these imitators, who amuse themselves together, either in running like partridges, gabbling like geese, or in aping some other animal."

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 be, I could not help laughing. The guide could hardly have intended a performance of the kind, which might have caused serious consequences; it is true, he was a little in liquor, but that was my fault rather than his.

The velocity and facility with which we had descended the declivity, was more than equalled by the difficulty we had in ascending from it. To drag me and the narte from the abyss required all the dogs of the other vehicles, as well as the help of all the drivers, yet we succeeded at length; when upon replacing the baggage, my pocket-book, containing passports and other papers relative to my journey were missing; this, though perhaps an imaginary evil would have been severely felt by me. For a long time we searched in vain, turning up the snow, and at last I gave them up for lost. Such a loss never did, nor probably ever will happen to any other person: the papers which formed its contents are not likely to be again granted. The poor guide was the picture of despair, and vowed to do penance if he could only recover them, which at last was effected through the exertions of the brandy chief. We arrived thence all well, and
535 fared heartily. Napanas contains eight dwellings and an excellent Toion, who induced the people under his command to show me the national dance. The poor fellows willingly obliged me, showing the improvements they have made upon the practice of bears, or rather, perhaps, on that of goats. The dance consists in a variety of distortions of features

29:Cochrane T-2 (1821-22) 1824 Kamchadal

535 and limbs, all doubtless derived from the ridiculous and wanton customs of their ancestors. The dance of the Cossacks is equally bad if not worse, yet I have seen it often practised in Yakutsk by females who should have known better. The woman, who is the principal performer, commences the dance with a handkerchief extended by the hands, somewhat like our own shawl dances; now used to hide her face from one, then from another, but always with the object of singling out him whom she most prefers as her partner. In a most unbecoming posture she approaches the favourite from the centre of the room; now dropping her head with a pensive air alternately upon each breast or shoulder, while her hands are employed in committing outrages upon decorum. The man, having taken hold of the handkerchief, joins the dance; the woman now reluctantly affecting to quit, appears again as anxious to rejoin him; this sort of antic motion is continued, till at length the woman sinks as from fatigue upon her knees, and in the act of falling is dexterously recovered by the man; and thus the dance closes. The agility and imitative powers of these wild Asiatics are really surprising, and I make no doubt that were they to have an opportunity of seeing the modern improvement in the art of dancing, as *exhibited* now-a-days in various public theatres, they would be found capable of imitating, not only *bears* and *goats*, but *geese* also.

000 From Napanas I proceeded down the river of its own name to its junction with the Tygilsk, hav-

his belly, being, as he ſaid, ordered to do it by the muſhroon. 276

The *Kamtſchadales* and the *Koreki* eat of it when they reſolve to murder any body; and it is in ſuch eſteem among the *Koreki*, that they do not allow any one that is drunk with it to make water upon the ground, but they give him a veſſel to ſave his urine in, which they drink, and it has the ſame effect as the muſhroon itſelf. None of this muſhroon grows in their country, ſo that they are obliged to purchaſe it of the *Kamtſchadales*. Three or four of them are a moderate doſe, but when they want to get drunk they take ten. 276 437

The women never uſe it; ſo that all their merriment conſiſts in jeſting, dancing, and ſinging. Their dance is in this manner: The two women that are to dance ſpread a mat in the middle of the room, and kneel down upon it oppoſite to one another, having a little tow in each hand. At firſt they begin to ſing very low, moving a little their hands and ſhoulders; by degrees they raiſe their voice, and encreaſe the motions of their bodies, 'till they are quite out of breath and fatigued. This ſtrange, uncouth entertainment, as it appeared to me, ſeemed greatly to delight the *Kamtſchadales*: ſo ſtrongly is every nation prejudiced in favour of its own cuſtoms. 535

In their love-ſongs they declare their paſſion to their lovers, their grief, hope, and other affections. The women generally compoſe them, and have clear, agreeable voices. Though they do not want an inclination for muſick, yet they have no muſical inſtrument, except a ſimple flute, and upon that they cannot play any tune. 533 534

Another of their amuſements is mimicking other people in their ſpeaking, walking, and all other actions. Whenever a ſtranger comes to *Kamtſchatka* they give him a new name, and obſerve every thing about him very carefully, which they mimick 536

 for

for their diverſion in all their entertainments.

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY
576
261

WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.
576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

"A Tale about Geese (2)

2. For a variant of this tale see American Museum of Natural History. Memoirs, v. 10, p. 335.

There was once a gander who lived with his wife. They laid eggs, from which goslings were hatched. One of them had no wings. Autumn came and it grew cold. Other geese were flying south. The gander and his wife began to think: 'How shall we take our wingless child with us?' They shed tears. But it grew very cold. One night the gander and his wife departed, leaving behind the wingless gosling who was asleep.

At dawn the gosling woke up and [finding himself alone,] cried:

'My father and mother are gone.'

Then it began to sing [wail?]

'My mother, my mother has abandoned me, the wingless gosling.' [5]

The gander and his wife heard the child wailing. They shed tears afresh, and returned. Their hearts were aching for their child and they wondered how they could take it with them on their journey. But it was getting colder and colder. And so one night they flew away again, leaving the wingless gosling behind. When the

gosling woke up at dawn, it wailed:

'My mother, my mother has abandoned me, the wingless gosling.'

A fox who happened to pass by heard the gosling lament. He approached the gosling and invited him to stay with him.

'Come with me, 'he said,' I will take care of you.'

The gosling replied:

'No, fox, I will not come to stay with you. You will eat me up.'

'No, I am not going to eat you up.'

But the gosling would not go with the fox.

The fox got angry and said:

'When the pond freezes and you have nothing to eat, I will come and eat you up anyhow.' And he went away.

The gosling started to wail:

'My mother, my mother has abandoned me, the wingless gosling, and now I shall freeze in the pond.'

He kept on swimming in the pond [and wailing]. Sinañewt (3) was passing by

3. A female character figuring in many of the Kamchadal tales - the daughter of Kutq (Raven).

and heard someone wailing. The sound was so sad that she started to cry. Then she saw the gosling swimming in the pond. She made beautiful scoops [nests?] out of grass, and went up to the pond and asked the gosling to go with her.

'Come with me, 'she said,' you will freeze here.'

Finally the gosling agreed. She put him into a nest and carried him home with her. There she dug out a pond and stocked it with fish. In that pond the gosling passed the winter.

Then spring came. Sinañewt made a pair of wings for the gosling and fastened them on him. The gosling flew off and after a while came back. Sinañewt asked him:

'Well, how are the wings?'

'They are not bad. I flew quite a distance.'

The next day Sinañewt made another pair of wings and fastened them on the gosling. Again he flew off and, after a while, came back.

'Well, how are these wings?' Sinañewt asked.

'They are pretty good; I flew a long way.' [6]

Then Sinañewt made a third pair of wings and again sent the gosling out to try them. He flew off and when he came back she asked him:

'Well, how are the wings?'

'They are very good, as though they grew on me.'

Sinañewt then said:

'Well, now go and meet your father and mother.'

And the gosling flew off to meet his father and mother. He came upon some goslings and asked them:

'Where are my father and mother?'

'They are flying just behind us,' was the answer.

Then he met his father and mother. They sat down.

'Where are you bound for?' they asked him.

'To meet you.'

'To whom then do you belong?'

'I am your child.'

'You are deceiving us. Our wingless child we left behind.' And the parents began to cry. The gosling said:

'I will tell you about me. Last year you left me behind on the pond. There I stayed and wailed. At first a fox came along. He invited me to go with him. Later Sinañewt came and took me home with her. There I passed the winter. She took good care of me and made me a pair of wings.'

The gander and his wife were happy.

'Well,' they said, 'let us go.'

They went to the home of Sinañewt. The oldest son of the two geese married Sinañewt. They all rejoiced and from that time on they lived happily lacking for nothing."

18: Yarmolinsky--6-7 L-4 (no date) 1947 Kamchadal--1-3
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"Buried Alive.

Once there lived a man called Kutq with his wife, Miti. They had a son, Ememqut, and a daughter, Sinañewt. Ememqut lived by himself, and his father did not get enough to eat [?]. One day Kutq said to his wife:

'Miti, my time is near. Tomorrow I shall die. Make all preparations. Get some fat and meat from Ememqut, and you supply kiprei (4) and a basket of shiksha (5)

4. A plant: Epilobium angustifolium (willow herb).

5. Empetrum nigrum.

berries. Put into the grave a bowl, a mixing spoon, a pestle, a bucket of water, some firewood, a stone lamp, and start a fire there.'

Miti started preparations for Kutq's journey.

'Kutq, you are lying,' said Miti. 'You are not going to die.'

'Yes, I am, Miti,' retorted Kutq. 'It is true.' [7]

Miti started cooking the meat, making tolkusha (6) and other foods to put in her

6. A native dish regarded as a dainty, which is made by pounding fat

with several ingredients, including berries and the roots of sarana [Polygonum viviparum]. 'The tolkusha prepared with reindeer fat tastes well,' writes Jochelson in one of the unpublished studies mentioned above, 'but one cannot say the same of tolkusha with seal's fat.'

husband's grave. Then Kutq had a hearty meal, washed himself, and sat down. The whole family looked at him. Suddenly Kutq opened his eyes wide and dropped dead. The family took fright. Ememqut dug a large grave and covered it with boards. They took Kutq from the house into the courtyard and carried him to the grave. Sirim (7) noticed

7. In another tale she figures as a daughter of Kutq and Miti.

that the dead man was smiling and she smiled, too.

'Look,' she said, 'Kutq is smiling.'

'Dont you tell lies,' said Miti. How can a dead man smile?

Kutq was laid in the grave together with much food. When it turned dark, Kutq lit his lamp, started a fire and began to pound tolkusha. Sirim, going out of the house, noticed a light in Kutq's grave and heard the noise of pounding. She returned to the house and said:

'Miti, there is a light in Kutq's grave and there is a noise coming from it as of someone pounding tolkusha.

'Why tell lies?' said Miti. 'How can a dead man pound tolkusha? You are crazy.'

Kutq continued to stay in his grave and have hearty meals. When the food gave out, he left the pit and made for home. When they saw him coming, the family took fright.

'Don't be afraid,' said Kutq, 'I came alive again. I was not admitted to the other world. Miti, call the children together.'

When all the family was gathered together, Kutq said:

'Ememqut, God commanded you to feed me well, to honor me, and he desires us to live together.'

Ememqut began to feed his father well and to honor him, and Kutq ceased to be in need and he had plenty of everything."

"Kuskl'naqu and the Crab (8)

8. For a variant of this tale see American Museum of Natural History. Memoirs, v.10, p.334.

Once there lived a man called Kuskl'naqu. He decided to go out to the promontory. On the way he met a crab, and said to him:

'Little crab, take me on your shoulders and carry me.' [8]

'When do you want to be carried?' asked the crab. 'I will not sleep any more now; I will carry you.'

Kuskl'naqu then sang the following song:

'Crab, crab, wake up and carry me.'

'Very well, Kuskl'naqu, come on, I'll take you on my shoulders and carry you.'

He carried him toward the sea and kept on going a long time.

'Well, crab, 'said Kuskl'naqu, 'you've carried me far enough. If you carry me any farther, you will drown me in the sea. Enough!'

'Well' said the crab, 'you kept me from sleeping and ordered me to carry you. So now, stay where you are.'

Then Kuskl'naqu sank to the bottom of the sea. There he found a house with people

in it. They received him well , seated him and fed him dried meat and other good things. He became very thirsty, but the people hid all the water and the water vessels and went to sleep, making believe they did not know that Kuskl'naqu was thirsty. At night Kuskl'naqu woke up and started to look for water, but could not find any.

'Girls,' he cried, 'wake up, dear girls, I am thirsty! '

But they pretended to be fast asleep.

'Sisters,' they said to each other, 'let us look at him at least with one eye. He is thirsty.'

Then he made his way to the river but found that the river had dried up.

'Well,' he exclaimed, 'what have the girls done with the water? Where is it? Why is the earth dry?'

Then he started back to the house. When he got there he sat down and said he would give his family for a glimpse of water. [?]. He spoke of his Miti [his wife?] looking at herself in a bucket of water and of his Anaráql'ñawt [his daughter?] combing her hair, using water as a mirror. At last he spoke of his pretty daughter Sinañewt, who was looking at her face in another bucket. [The people listened to him, making believe they were asleep.]

Presently they all woke up.

'Oh, grandfather, you are thirsty,' they said; 'girls, hurry up and fetch him a drink.'

18: Yarmolinsky--7-8 L-4 (no date) 1947 Kamchadal--3
116, 539

Kuskl'naqu emptied the bucket that was brought to him. Then he made for the river and bowed down to drink the water from the river. He emptied the whole river. Then he died."

J: Jochelson E-5 (1900-01) 1908 RY4 Koryak
Kamchadal / RY3

XIV. — TALES OF THE KAMCHADAL.

Villages of Tighi'l, U'tkholoka, Ka'vran, and Seda'nka.

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131. Kutq and his Wife.*

It was in the time when Raven (Kutq) and his wife were living. Once upon a time he asked her to go with him to gather eggs. Raven's wife attached a bullock to her sledge, and started on the journey. The old man went afoot. The old woman drove her bullock for some time, when a Hare ran across the trail, and said to her, "O granny! let me have a place on your little sledge." — "Where shall I put you? You will break my little sledge." — "If you will not give me a place, I shall eat you some day." Then she let him get on, and said, "Sit down here at the back."

They went on, and met a Fox. "O granny! where are you going?" — "I am going to look for eggs." — "Let me sit down on your sledge, granny." — "Where shall I put you? You will break my little sledge." — "If you do not let me sit down, I shall eat you." — "Well, then, take your place here on the runner."

After that they met a Wolf. "Where are you going, granny?" — "We are going to look for eggs." — "Take me with you, granny." — "How can I take you? You will break my little sledge." — "If you do not take me, I shall eat you." — "Well, then, take your seat here in the front."

After that they met a Bear. "Take me with you, granny." — "How can I take you? You will break my sledge." — "If you do not take me, I shall eat you." — "Well, then, sit down in front, on the curved shaft."

They proceeded, and after a while the sledge broke down. The old woman began to cry. Then she sent the Hare for a good straight stick to replace the broken runner; but the Hare brought only a few willow-twigs. "Oh, you crazy thing! — Fox, you bring a new runner!" The Fox brought her only a few thin, half-broken boughs. The old woman grew angry, and sent the Wolf; but he brought an old piece of half-rotten aspen. Then she scolded the Wolf, and sent the Bear; but he brought a tree-trunk all hollow within.

Much as the old woman was averse to leaving her bullock, she had to go herself. While she was away, the Wolf and the Bear killed the bullock, and taking off the skin whole, without a cut in the abdomen, filled it with

773 moss and leaves. They ate the meat themselves, and put the bullock in its place, as if it were alive.

539 The old woman came back with the runner, and found all the animals gone, which pleased her greatly. She mended her sledge, sat down, and urged the bullock; but after she had struck it a few times, it fell down. The old woman jumped down and hurried to the bullock. Behold! there was only the skin filled with moss and grass: all the flesh was gone. The old woman began to cry, "Oh, the bad Bear! He killed my poor bullock."

She walked on in search of the old man. At last she found him on the shore of the lake. He had gathered plenty of eggs, and had eaten them all. "Oh!" said the old woman, "the Bear and the Wolf have eaten my bullock. I feel very unhappy. Give me at least an egg or two." — "Leave me alone!" said the old man. "I have not yet eaten my fill."

The old woman grew angry, and went to look for eggs herself. After a few moments she exclaimed, "Oho! I have found an egg." — "Whose egg is it?" asked the old man. "It is a swan's egg." — "Then it is a very big one," said the old man.

The next moment he exclaimed, "I have found an egg!" — "Whose egg is it?" — "An egg of a snow-bunting." — "Then it is a very small one."

After a while the old woman cried again, "I have found an egg!" — "Whose egg is it?" — "An egg of a black goose." — "Then it is a very big one."

Then the old man exclaimed, "I have found an egg!" — "Whose egg is it?" — "An egg of a woodpecker." — "Then it is a very small one."

"Well," said the old woman, "let us boil our eggs I am hungry." They dug some small round holes in the ground, put their eggs into them, and started a small fire all around the holes. They did this because they had no cooking-vessels. Then the old woman said to her husband, "Give me some of yours. Your eggs are small, I am sure they are done already." The old man refused. "Leave me alone!" he said. "You have eggs of your own, which are large enough."

Out of spite the old woman trampled on his eggs, and smashed them all. Raven cried; but the old woman took her eggs out of the hole, and ate them. Raven cried still louder, and asked her for some; but she gave him nothing, and ate all the eggs herself. Then she said, "Now, let us go home. Probably our children are crying for us."

She ran ahead, and found a small hut standing near their trail. She threw herself down on the floor, turned into a small child, and cried like a real baby. The old man came to the hut, and, hearing the cries of the child, pitied it, and took it in his arms. He soothed and rocked the baby, but it only cried the louder. "Give me water," it said: "I am thirsty." The old man gave it some water. "I do not want water! Give me some cold tea."

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak Kamchadal RY3

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The old man gave it some cold tea; but the child cried, "I do not want tea! Give me the lamp." In this manner the old woman fooled and worried her husband until he put the baby down. "Oh, you fretful thing!" he exclaimed. "I don't blame those who left you here alone by yourself." Then he was overcome by pity, and took it up again. He carried the child out of the hut. "Put me on the sod-bank!" cried the child. He put it on the sod-bank. "No, take me up again!" He took it up again. "Take me into the hut!" The old man entered the hut, and continued to coddle the child, for it was crying all the time. He was very angry with it, but had no heart to leave it alone. All of a sudden the old woman laughed aloud in his very arms. "Oh, you vermin! You have worried me to death!" The old woman jumped down from his arms, and fled. The old man was so tired that he lay down immediately, and fell asleep.

The hut, however, belonged to the Mouse people. As soon as the old man was fast asleep, a number of the Mouse people went into the hut. "Oh!" they said, "here is Raven sleeping in our hut. Let us play a trick on him. Who has a piece of red cloth?" — "I have!" said one small Mouse. "Then let us sew it firmly over Raven's eyes." When this was done, another Mouse said, "Now, let us tie a bag under his anus, so that his excrement will fall into that bag." They fastened the bag to him, and then awakened the old man, who looked around, and saw everything flaming red. "Fire!" thought he. "The house is burning!" He ran away frightened. On the way, however, he wanted to ease himself. He crouched and defecated; but when he arose and looked back, he could not see any excrement. "What a strange place!" thought he, and made another effort; but still he did not see anything on the ground. He was frightened still more, and ran home. When he came to his house, he saw that it was also flaming red. "Fire!" cried he to his wife. "Take your best son, and break his head against the wall. Put out the fire with this sacrifice." The old woman took one of their sons, and, striking him against the wall, smashed his head into fragments. The old man continued to cry, "Put out the fire! Our house is burning!" Then the old woman looked at her husband. "How now?" said she. "You have a red cloth over your eyes!" — "Oh!" said the old man, "this is a trick of the Mouse girls. They were sewing in the hut, and probably they have sewed this cloth over my eyes." The old woman scolded her husband. "Instead of bringing up my children, you only destroy them one by one."

The old man turned to go out; but the old woman said to him again, "You smell very bad. What is the matter with you?" — "Oh, my wife!" said he, "I do not know what has happened to me. I found a very strange place. After I squatted down and tried to defecate, I found nothing on the ground beneath. I will try again: perhaps it will be otherwise here."

He went out and tried to defecate; but when he looked down on the

I: Jochelson E-5 (1900-01) 1908 RYU Koryak
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ground, there was no excrement at all. "It is some sorcery," thought Raven. "Let me go and call the old woman. — Come here!" he said to the old woman. "There is some sorcery about this matter. Let me try once more, and you watch me to see what is wrong." He took off his trousers and squatted down. The old woman saw the bag, and said to him, "Who fastened the bag to your buttocks?" — "Oh!" said he, "surely the Mouse girls played this trick on me." — "Well," said the old woman, "you have destroyed one of my children; now help me, at least, to bring up the others." — "I will," said the old man. "Now make haste and twist some snares. I will go and spread them to catch ptarmigan."

He went for ptarmigan, and, spreading his snares, soon caught a great many birds. Then he built a hunting-lodge, and lived in that place, without regard to his children. After a long time, however, he visited the old woman. She asked, "What luck have you had? Have you caught any birds?" — "None at all," he answered. "I am almost starved to death." The old woman gave him food, and then he said, "I will go and look after my snares. Perhaps a bird or so is caught in one of them." He went away. The old woman followed him. He was so busy with his snares that he did not notice the old woman. Finally she found the hunting-lodge, and, entering it, saw all the ptarmigan that Raven had caught. "Oho!" she said; "see how faithless the old man is!" She took a ptarmigan, plucked it thoroughly, and then instructed it how to frighten Raven. "Hide yourself," she said; "but when the old man takes off his clothes to go to bed, run out of your hiding-place, and imitate his actions. Repeat all he says, and follow him about everywhere." In this manner the old woman spoke to the ptarmigan. Then the old woman went away.

Raven came to the cabin. It was already dark. He brought a big bundle of ptarmigan, and placed his pot near the fire to cook his supper. The cabin grew very warm: so he took off all his garments, and sat naked near the hearth. All at once a ptarmigan jumped out of the darkest corner, and cried, "Karebebebe!" It began to run around, crying, "Karebebebe!" The old man was frightened. He said, "This is again some sorcery!" The ptarmigan repeated, "This is again some sorcery!" — "Oh!" he said, "it is a charmed ptarmigan!" and the ptarmigan repeated, "Oh! it is a charmed ptarmigan!" The old man ran away quite naked; but the ptarmigan followed close behind. He hurried to his wife, and rattled at the door. "Oh!" he cried, "open the door!" and the ptarmigan repeated, "Oh! open the door!" The old woman opened the door. "Oh, my wife! take a club!" — "Take a club!" repeated the ptarmigan. "Kill this charmed thing!" — "Kill this charmed thing!" repeated the ptarmigan. Then the old woman asked him, "Tell me, will you again eat all you catch by yourself?" — "Nevermore!" cried Raven. "My lodge is full of birds. But please kill this awful charmed thing." The old woman seized a club and killed the ptarmigan. "I am afraid to go to the lodge,"

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak
Kamchadal RY3

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said the old man. "Please go and get the ptarmigan." The old woman brought the ptarmigan, and they ate their fill.

Then the old man went to sleep. The old woman sat down at the window to mend her coat. In the mean time the Mouse girls came to the window from the outside, and went acoasting on their sleds past the window-sill. The window was darkened, and the old woman had not enough light. Then she cut off her nose, saying, "It is the nose that shuts out the light." But it continued to be dark. She had very thick lips: so she cut them off, saying, "My lips shut off the light." Still it was dark, as before. After that she cut off her cheeks; but the light was no better. At last she looked out of the window, and saw the Mouse girls coasting. "Oh, those Mouse people!" she said. "It is because of their tricks that I have cut off my whole face. I have lost my lips and my nose."

She sewed up a large bag, and came out of the house. The Mouse girls continued coasting. "Ah, ah!" said the old woman, "really you are very clever at this game. Now slide down all of you at the same time. I want to see who will be the first to come down." Meanwhile she opened her bag and spread it near the window-sill with its mouth upward. The Mouse girls slid right into the bag. "Now I am going to keep you in this bag till your meat is old enough to suit my taste," said the old woman. The Mouse girls cried, and begged her to set them free. They said, "We will bring you every kind of food that exists in the world for our ransom;" but the old woman was so angry that she paid no attention to their promises. She took the bag into the thick of the forest, and when she found a large tree, she said to it, "O tree! bend down your top." The tree bent down, and she tied the bag to its top. Then she said again, "O tree! raise your top;" and the tree stood straight again. Then she said to the Mouse girls, "Now stay there until your meat is stale. When it is ready, I will come and eat you." She left them and went home.

The Mouse girls were crying on the top of the tree. At last a fox heard their cries, and came to the tree. "Who is crying there?" — "We are crying, Auntie Fox," said the Mouse girls. "How did you get there?" asked Fox. "Raven's wife put us here." — "And how did she do it?" — "She said, 'O tree! bend down your top;' and the tree really bent down. Then she tied us to the top." Fox cried, "O tree! bend down your top!" The tree bent down, and Fox untied the bag and set the Mouse girls free.

The Mouse girls were very happy. Fox said to them, "Go and fetch plenty of moss." In a moment the Mouse girls brought the moss, and Fox filled the bag with it. She tied the bag to the top of the tree, and said, "O tree! stand straight again!" and the tree returned to its former position. The Mouse girls went with Fox, and lived in her house. Fox told them to go and bring her all kinds of things. "Now you have to serve me for a

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while. If it had not been for me, the old woman would have eaten you." The Mouse girls went pilfering everywhere for the benefit of Fox, and brought her all sorts of objects, especially a variety of food. Fox became quite well-to-do, and lived in affluence.

In two weeks the old woman said, "Let me go and look at the Mouse girls. Probably their meat is now just good for eating." Raven heard her words, and said, "Please take me along." She said, "Come along! I have there a big bag full of mouse-meat. I will give you some of it." They came to the tree, and she said, "O tree! bend down your top!" The tree bent down. But there was no meat in the bag: it was filled with damp moss. "Oh!" said the old woman, "I am sure Fox did this. I will go and kill her for that."

When Fox saw the old woman approaching, she hurriedly called the Mouse girls, and bade them bring plenty of alder-bark. Then she made them chew the bark, and spit the juice into a vessel. She bandaged her head with towels. She laid herself down on a bed. She placed close to her pillow a bowl of red alder-juice. Then she ordered the Mouse girls to conceal themselves, and began to groan like one very ill. The old woman entered. "Good-morning, little Fox!" — "Good-morning, grandmother!" — "Little Fox, why have you let all the Mouse people out of my bag?" — "Leave me in peace," said Fox. "I have nothing to do with this. This is the third week since I was taken dangerously ill." — "Oh, poor Fox!" said the old woman. "You certainly do look ill." — "It is true," said Fox. "See the blood I have lost within the last few days!" — "It is awful!" said the old woman. "Perhaps you will empty this bowl for me," suggested Fox. "It is really overflowing."

The old woman took the bowl and started to go. "Empty it into the river," said Fox, "from a place where the bank is the steepest. But mind you, while carrying the bowl, try to keep your eyes from looking behind you: otherwise you will become ten times more ill than I." — "No," said the old woman, "I shall not look behind."

She took the bowl and carried it away; but Fox stole along behind her. The old woman heard somebody following her, but was afraid to look back, lest she become ill. At last she came to the river, and, choosing a steep place, was about to empty the vessel. At that moment Fox pushed her from behind down the bank into the river. The old woman tried to swim, and cried, "Oh, little Fox! save me! I am drowning!" — "I will not save you. Why did you wish to kill the Mouse girls?" The old woman was drowned, and the Mouse girls were full of joy. They served Fox still better than before. They brought her edible roots of *Claytonia acutifolia*, and they all lived happily ever after. That's all.

Told in the village of Tighi'l by a Russianized Kamchadal.

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132. The Thunder People and Raspberry.*

Sū'na-ñe'ut had a daughter whose name was Raspberry[1] (Ăyanu'mlixčax). When she was full grown, the Thunder people came down and wanted to marry her. She, however, rejected their suit. Then they came down from the sky through the roof-entrance, and trampled on her. She became more considerate, and treated them with all kinds of roots and berries, everything that grows on the ground. That's all.

Told in the village of U'tkholoka.

133. Kutq and his Sons-in-Law, the Winds.*

Raven (Kutq) lived with his wife Miti'. One of their daughters was Sū'na-ñe'ut; the other one, Aña'rukla-ña'ut. One of their sons was Eme'mqut; and the other, Čiji'l-kutq. North-Wind (Yemi'hin) courted the elder daughter, and married her. Then clear frosty weather set in. It was so cold, that, when people walked about, blood would drip from the tips of their nails. Therefore Raven felt annoyed.

At the same time came South-Wind (Riri'un), who married Raven's other daughter. Then the weather grew milder. It began to rain, and it was damp and warm. Raven was pleased with the change. He argued, that, though his garments became damp, it was easy to dry them again; whereas the cold hurt the body.

Sū'na-ñe'ut was pregnant, and gave birth to a son. Her husband said to her, "While I am with you, there will be some clear weather in this country: when I am gone, you will live in constant dampness." Then he left his wife and went away. Immediately it began to rain in torrents. Dampness continued without cessation. All living things were starving, — men, beasts, and herds. Raven lost his eyebrows, which fell off because of the damp; and Eme'mqut, likewise, lost half the hair from his head. They had no food, and were starving. Sū'na-ñe'ut tried to sustain her mother with scraps of food that she gathered around their house.

One day she took an old skin of a ground-seal from their storehouse to cut a garment for her little son. When it was ready, she dressed her boy in it, and said to him, "Go to the country where your father lives, and try to find him. I shall stay with the other people, and we will wait for you: but perhaps we shall starve to death before you get back." The boy went in search of his father. In the mountain-passes near his father's house, he fell down from exhaustion. North-Wind's sister went out of the house, and

[1] *Rubus arcticus.*

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saw some dark object in the mountain-pass near by. She said to her brother, "You roam about the world, and tell us nothing of what you have seen. Perhaps you have left a son somewhere, and it is he who has fallen from hunger and exhaustion. Go, therefore, and bring him here." North-Wind brought his son into the house. They took off his seal-skin garments, and dressed him in a nice suit of soft mountain-sheep-skin. Then North-Wind's sister said to him again, "You roam all over the world, but you tell us nothing of what you have seen. Perhaps you have somewhere a wife who is starving without your help. Go, find her, and relieve her from want."

About this time Su'na-ñe'ut went out of her house, and saw far ahead a faint streak of light breaking through the clouds. Then her husband and her son came to her mind, and she said, "There was a time when I had a husband. We lived, and had plenty to eat, and now we are dying from want." Miti' also began to complain, and said, "There was a time when we had a dry son-in-law who gave us dry weather. While he was with us, we lived in abundance, and had our choice of the best food. But this son-in-law of ours is good for nothing: he is rotten, and we rot with him." Meanwhile the sky began to clear, and a bright dawn arose above the horizon. The air grew drier, and at last North-Wind came. They had again plenty of food. Raven grew angry with his other son-in-law, and kicked him out of the house. After that they lived well again. That's all.

Told in the village of Ka'vran.

134. Big-Raven and Big-Crab.*

It was at the time when Big-Raven (Quskı'lnaku) lived. His wife was Miti'; his eldest son, Eme'mqut; his second son, Kotxama'mtilqa'n; his eldest daughter, Su'na-ñe'ut; his second daughter, Añ'arukla-ña'ut. His third daughter, N·a'a, was his favorite. Miti''s brother was named Cici'lxan; her sister, La'ki. They all lived together.

Big-Raven went along the coast, and saw Crab (A'vva) lying on the sand. At first he thought it was a flock of geese; but soon he was sure it was Crab. Then he began to sing, "O Crab! You have slept long enough. Now it is time for you to wake up. I am very hungry. When the tide comes, take me on your back; take me to your land; give me plenty to eat." — "All right!" said Crab.

He took him on his back, and carried him down into the depths of the sea. There Big-Raven was fed with dried seal-meat that was harder than dry wood. Crab's sons said, "Do not give him any water to drink. Let him tell us what brides may be had at his house." They dried up the river, so that he could get no water to drink. Big-Raven awoke, and wished to drink,

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but there was no water. Then he sang, "Just as we are living now, the same kind of life shall people lead in future times. The people will give their daughters to be married. My elder daughter, Sŭ'na-ñe'ut, is now sitting complacently looking at her reflection in the water-hole, and I am dying from thirst."

Then they let fall a single drop of water on the tip of his tongue. After a while he sang again, "Just as we are living now, the same kind of life shall people lead in future times. Daughters shall be given in marriage. My second daughter, Añá'rukla-ñá'ut, is sitting now over a water-hole, and I am dying from thirst."

Then they let fall another drop of water on the tip of his tongue. After a while he sang again, "Just as we are living now, the same kind of life shall people lead in future times. Daughters shall be given in marriage. My youngest daughter, N'a'a, is looking at her reflection in the water-hole, and my throat is parched from fiery thirst."

Then they let the river flow. Big-Raven drank his fill, and took along a bucket of water. Then Crab carried him back to his house.

On the next day three seamen came to get the brides. Two of the girls staid in the house; but the mother hid the youngest one deep in the cellar, and put her inside of a sleeping-room with a threefold cover. The eldest guest hugged Sŭ'na-ñe'ut, and in a moment a baby began to cry inside of one of the legs of her breeches. Then Sŭ'na-ñe'ut said, "Rip open my breeches, and take out the baby. It will be stifled in there." The second guest did the same with Añá'rukla-ñá'ut. The third one had no bride. He could not sleep because he felt so lonesome. About midnight he observed the old woman stealing out, carrying food in a basket. He followed quietly, and, after the woman had come back, he arose, and felt about with his hands until he found the door. He entered the cellar, and found the girl, who immediately was delivered of a daughter.

After a while Big-Raven said, "You have staid here long enough. It is time for you to take your wives to your own country." The seamen went, and Raven's sons followed. After a while Raven's sons married among the Sea people, and brought their wives to their own country. Now they began to live happily, and left off quarrelling among themselves. That's all.

Told in the village of Seda'nka.

135. Sŭ'na-ñe'ut and her Goose-Husband.*

A party of geese came to a lake. They had fine broods of young goslings. When the autumn came, the geese wished to fly away. All the goslings took wing, except one that was unable to fly. The other geese waited a while for it. At last the ice began to cover the sea, and the geese flew away.

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They kept their eyes straight ahead of them, as they did not wish to look back and see the poor gosling that was left behind. Goose-Boy remained alone on the lake, and sang, "Ah! I have no wings, and I am left behind because I am unable to fly." A Fox walked along the shore, and, hearing the song, went nearer. "Why are you crying so piteously?" — "I am crying because I am left alone." — "Come nearer; swim to the shore. I will take care of you." — "I am afraid you will eat me." — "Don't worry about that. When the lake freezes, I shall eat you, just the same."

Big-Raven was flying about. "What is it crying there so bitterly?" said he. "Let me have a look at it." After he had seen the gosling, he went back to his house, and said to Miti', "Call your eldest daughter, Sú'na-ñe'ut." Miti' thought, "Certainly he wants to blight her life again." Nevertheless, she called her. "There on the lake," he said, "a Goose-Boy has been left alone. Will you bring him home and take care of him?" — "Oh!" she said, "you are at it again. You want to utterly blight my life!" — "Nay," says he. "If you are a brave girl, you will get along very well."

Sú'na-ñe'ut took the gosling. In due time spring came, and Goose-Boy grew large, and began to fly about in search of food. Sú'na-ñe'ut, however, ate by herself, feeding on meat. Her Goose husband was absent for a long time, and Sú'na-ñe'ut began to worry. She went out of the house and looked in all directions. At last she laid two eggs, which she ate immediately. After that the geese arrived, and the Goose-Man flew to meet them. The first-comers were no relatives of his, but the next were his parents. They were very angry with their daughter-in-law because she had eaten the eggs, and therefore they flew away, leaving her behind. She tried to follow; but her short wings proved too weak. Then the Goose people flew upwards, and Sú'na-ñe'ut was left down here.

Told in the village of Seda'nka.

136. Raven's Quest of a Bride for Eme'mqut.*

It was at the time when Raven (Qutq) and his wife were living. They went to gather stone-pine nuts. He said, "Let us call to each other, 'Iho!'" They called to each other from a distance. Raven called, "Miti'!" and she answered, "Iho!" He was pleased with his idea, and said, "Now let us call to each other with a repeated call." Again he called, "Miti'!" and she answered, "Ihoho!" He was pleased with that still more, and said, "Let us call to each other with a thrice-repeated call." She was tired, and when he called again, "Miti'!" she answered "Ihohoho!" but in a very angry voice. Raven felt annoyed, and, transforming himself into a raven, flew away.

He came to a village, and alighted on a big tree. A girl passed by,

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and said, "There is that miserable bird! Why does it come here?" Raven said nothing. Another girl passed by. "Oh!" she said, "this poor bird has come here again!" and she fed it with scraps of meat and with crumbs of pudding. After that Raven went home, and, meeting Eme'mqut, he said to him, "I have found a good bride for you. Go and choose for yourself. Take the pleasant one, but leave the one that is cross-tempered."

Eme'mqut transformed himself into a raven, and flew to the village. He also alighted on a tree. One girl passed by, and said, "There is that miserable bird again!" He let her go by. The other girl said, "There is that poor bird again!" and fed it with meat and pudding. Eme'mqut dropped down from the tree, and caught the girl. In the next moment a small child was heard crying in her arms.

They went home. Raven whistled, and several reindeer came to him one by one. Some were spotted; others were black; still others, pure white. He gave the spotted ones to his son, and the white ones to his daughter-in-law. The black ones he drove himself. They arrived at their house. Eme'mqut said to his mother, "Mother, I have brought a young bride. Kick the walls of the house [to make it larger]!" Miti' kicked and pushed the walls, and the house became larger. After that they lived well, and so they still live, even at the present time. That's all.

Told in the village of Seda'nka.

137. Kutq's Daughters.*

Two daughters of Raven (Kutq) found a whale, and entered its body. Then they began to float on the sea with the whale. After a long time they drifted ashore. The younger one was sleeping. The elder one came out, and, walking along the shore, began to gather willow-herb (*Epilobium angustifolium*). She brought back what she had gathered, and put it under the pillow of her sister. Then the latter dreamed. "Oh!" she said, "I dreamed I was eating willow-herb." — "Well," said the other, "look under your pillow." The younger one looked under her pillow, and found the willow-herb and various kinds of leaves and grasses.

They went out and walked along the shore. Close by was a village of the people of that country. The elder sister said, "I shall be married there. I shall transform you into a she-bear, and leave you here. When a suitor comes to take you, you must refuse him. The last to come will be the worst of all. He will carry a spear of shell. That one you must allow to take you." She transformed her into a she-bear, and tied her to a tree. Then she went to the village. Immediately she was married there. Then she said, "Down on the coast is still another girl." All the young men of

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the village went to look for her; but the she-bear reared on her hind-legs, and allowed no one to approach.

The last one to come, the worst of all, who carried a spear of shell, this one she permitted to approach, and, lifting her left paw, caused him to spear her. When he skinned the body, she turned into her former self, and he took her to the village. That's all.

Told in the village of Seda'nka.

138. The Girls and the Bears.*

A brother and a sister lived together. The brother made arrows. They were most beautifully made. He would not allow his sister to look while he was at work. He would say to her, "Do not look at my arrows! Your looking at them will cause them to break." His sister could not help looking at the arrows: so he pushed her, and she fell off from their pile-house. She lost her way in the thick underbrush, and at last came to a bear-den. A Bear-Girl came out, and jumped for joy, because she regarded the stranger as a new companion. She caught with her teeth the edge of the new-comer's coat, and even bit her several times as a sign of welcome.

The old She-Bear also came out. "Leave her alone!" she said. "You have torn her coat to pieces. Let her come into the house." The girl entered, and sat down to mend her coat. The old She-Bear looked on, and thought, "She sews very well. She is a good worker." Then she said, "My sons will come soon. Hide yourself. They are fierce, and they might do you harm." Then the girl hid herself. In a short time five young Bears came into the house.

"Oh, oh!" they said, "there is a woman smell here!" — "Nay!" said the mother. "You roam everywhere, smelling all kinds of odors: then you come home and ask about the smells. Take your supper and go to sleep." They tossed some fat salmon-heads to their sister. "Pick out the gristle!" Bear-Girl began to pick out the salmon-gristle; and the stranger stealthily helped her with her work. After supper the Bear-Men went to sleep. Then the old She-Bear said to her guest, "Now begone: otherwise they may find you in the morning." The girl stepped off quietly. About midnight the old She-Bear awakened her youngest son, and said to him, "You really ought not to sleep so soundly. While you were sleeping, a nice girl came to the house, and now she has gone again. She would have made a good bride for you. Go and try to bring her back."

The young Bear ran in pursuit; but the girl was already approaching her village. The people came out to meet her, and, seeing a bear following her, shot him with an arrow. The girl skinned the carcass; and as soon as the

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skin was off, a nice young man came out and wooed the girl. It was Eme'mqut. He married the girl. 773 539

Now, the girl had a female cousin who was good for nothing. This cousin envied the good fortune of the exile. She also had a brother who made arrows, and forbade her to look at them. She looked on, notwithstanding; but the arrows did not break. Then she took them, and broke them with her hands. Still her brother did not push her, and she had to jump down from their pile-house of her own free will.

After long wandering through the forest, she also found the bear-den. Bear-Girl came out, and tugged at her coat. "Oho!" she said, "see how she has torn my coat! See what damage she has done!" The old She-Bear requested her to enter. She sat down to mend her coat. The old She-Bear saw that she was very unskilful with her needle. The Bear-Men came, and the She-Bear told the guest to hide herself. At first she refused to obey; but Bear-Woman finally persuaded her to accept her advice. At last the Bear-Men went to sleep. The old She-Bear said, "Now begone!" The girl went out, but slammed the door, crying aloud, "I am going away!" Then the She-Bear began to think, "This one is really too bad!" She did not awaken any of her children. A big shaggy dog lay on the flat roof of the house, and the She-Bear told him to follow the girl. The dog followed. The girl came to the village, shouting, "A bridegroom is following me!" They came out and killed the dog. On skinning his body, nothing happened, and the dog's carcass remained a simple carcass. That's all.

Told in the village of Seda'nka.

139. How Kutq jumped into a Whale.*

Raven (Kutq) walked along the sand-spit, and found a small seal. He said, "If you were a good find, you would not be so far from the water;" and he pushed it back into the sea with his toe. Then he walked on, and found a spotted-seal. "If you were a good catch, you would not lie so far from the water." After that he found a big ground-seal, and treated it in the same manner. Then he did the same with a white-whale, and with an old bowhead-whale. At last he found a finback-whale, and then he said, "This is a good thing." He shouted to the people of the village, "I have found a whale!" Then the Koryak reindeer-breeders were seen hurrying to the whale from various directions. They had large knives. Raven was so frightened that he jumped into the mouth of the whale-carcass. He found there plenty of oil, and, filling his mouth with it, he jumped out and flew away. A Fox woman saw him, and asked, "From where are you?" — "Yum, yum,"[1] replied

[1] Ya'kyuñ — the whale. Raven tried to say, "From the whale," without opening his mouth.

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Told in the village of Seda'nka.

[1] Evidently by poison mixed with berries.

22: Guillemard T-2 (1882) 1886 Kamchadal

114 136 remains of many half-eaten fish lay on the banks. The bears are said by Kittlitz and others only to eat the head and upper part when the salmon are plentiful, but in almost every case we found that, though the head had been crunched up, it had, together with the tail and intestines, invariably been rejected. We were never fortunate enough to witness these animals fishing, but we were told that they walk slowly into the water where it is about eighteen inches in depth, and facing down stream, stand motionless awaiting their prey. The incautious fish, swimming heedlessly up the river, doubtless mistakes the bear's broad legs for a rock or tree-stump, and those who have once witnessed the almost lightning-like rapidity of a stroke from Bruin's fore-paws will have no difficulty whatever in completing the drama for themselves. The fish is apparently always taken to the bank to be devoured, for even the small ones do not seem to be eaten whole.

552 144 157 161 177 361 Sherowmy, or Sherowm,—for the Kamschatkans are fond of clipping the exuberance of their words, and turn Kamakoffakaya into Kamaki,—is a pretty little village of nine houses and forty-three inhabitants, situated on a branch of the Kamschatka River close to its junction with the latter. To the south lie a few acres of level grass and land enclosed by rough fencing, which give a home-like effect and an air of permanence which is wanting in most Kamschatkan settlements; while to the west and north flows the river, its banks thickly clothed with trees. The people, although a more or less mixed race, as are those of all the villages we had hitherto visited, nevertheless exhibited strong evidences of their Kamschatdale origin, and the high cheek-bones and general duskiness of complexion were in some cases very noticeable. They were very civil and willing to help us; and later in our journey we learnt to hail the preponderance of the Kamschatdale element with pleasure, for we then felt sure of meeting with none of the surliness of demeanour and barefaced extortion that seemed to be the leading characteristics of the half-breed Siberian Russians.

Although in appearance and ſize this animal ſeems to be very dangerous, and marches with ſuch a fierce mien that he looks like a true lion, yet is he ſuch a coward, that at the ſight of a man he hurries into the water; and when he is ſurpriſed aſleep, and awakened either by a loud cry or blows with a club, he is in ſuch fear and confuſion, that in running away he falls down, all his joints quaking with terror; but, when he finds no poſſibility of eſcaping, he will then attack his enemy with the greateſt fierceneſs, ſhaking his head and roaring very terribly; and then the boldeſt muſt ſeek to ſave himſelf from his rage. For this reaſon the *Kamtſchadales* ſeldom kill the ſea lions at ſea, unleſs when they can ſurpriſe them ſleeping there, but generally upon land; and when they find them aſleep on ſhore they approach them with great caution, going againſt the wind. But none dare undertake this game, but ſuch as can truſt to their ſtrength or their heels. Stealing upon them, they ſtrike a knife into their breaſt under their fore paw; the aſſiſtants in the mean time tying a cord made of ſea calf's ſkin, which is faſtened to the knife, about a ſtake. Then every one runs off as faſt as he can, and endeavours at a diſtance to wound him with arrows, or knives, which they dart at him; and at laſt, when his ſtrength is quite waſted, they diſpatch him with clubs.

When they find them aſleep at ſea, they ſhoot poiſoned arrows at them, and get off as faſt as poſſible. The wounded animal, unable to ſuffer the pain ariſing from the ſalt water in the poiſoned wound, runs himſelf aſhore, where they kill him outright with darts or arrows; or if the place is not ſafe for ſuch an attack, they wait until he dies of his firſt wound, which follows in 24 hours. This game is ſo honourable among the natives, that the man who has killed moſt of theſe beaſts is eſteemed the greateſt hero: for this reaſon many engage in this dangerous hunting, not only for the fleſh, which is looked upon as very delicate, but rather for the honour that attends it. Two or

many of the Eastern conquerors, as the *Lopari*, *Ostiaks*, and *Samojeds* were driven to the extremities of the North by the encroachments of other *European* nations. If *Kamtschatka* had not been inhabited before the *Tunguſi* had got a ſettlement, it is probable they would have fixed here, as being ſafer from the dangers of any ſudden attacks of their enemies. 174

Thus it appears likely, that the *Kamtſchadales* lived formerly in *Mungalia* beyond the river *Amur*, and made one people with the *Mungals*, which is farther confirmed by the following obſervations, ſuch as the *Kamtſchadales* having ſeveral words common to the *Mungal Chineſe* language, as their terminations in *ong*, *ing*, *oang*, *chin*, *cha*, *ching*, *kſi*, *kſung*; it would be ſtill a greater proof if we could ſhow ſeveral words and ſentences the ſame in both languages; but not to inſiſt only upon the language, the *Kamtſchadales* and *Mungals* are both of a ſmall ſtature, are ſwarthy, have black hair, a broad face, a ſharp noſe, with the eyes falling in, eyebrows ſmall and thin, a hanging belly, ſlender legs and arms; they are both remarkable for cowardice, boaſting, and ſlaviſhneſs to people who uſe them hard, and for their obſtinacy and contempt of thoſe who treat them with gentleneſs.

CHAP. III

Of the ANCIENT STATE *of the Natives of* Kamtſchatka. 175 622 554

BEFORE the *Ruſſian* conqueſt they lived in perfect freedom, having no chief, being ſubject to no law, nor paying any taxes; the old men, or thoſe who were remarkable for their bravery, bearing the principal authority in their villages, though none had any right to command or inflict punishment.

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them sometimes

5: Jochelson A-5 (1910-11) 1928 Kamchadal

000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

177 From the remnants of objects of Japanese culture no inference can be made as
325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka
● 554 at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal
172 knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

According to Steller (p. 320), the Kamchadal paid homage to pieces of iron obtained from the Kurilians. The iron was set up on a pole in front of the dwelling as proof of the wealth and special importance of its owner. Krasheninnikoff also states (II, p. 97) that every Kamchadal possessing a fragment of iron was deemed rich and lucky.

177 The Kamchadal, now Russianized, no longer live in subterranean houses,
342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
823 We may only surmise the reasons for such a diversity. We know that many of

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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Village, 18th-century engraving.

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At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed. [554] [614] [342] [592]

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens. [562] [591] [583] [182] [721] [648]

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest [171] [796]

7:Lesseps T-3 (1787-88)1790 Kamchadal

317 but objects cannot be seen through them.
342 The leaves of talc are more clear, and approach nearer to glass; in the mean time they are not sufficiently transparent for persons without to see what is going on within: this is manifestly no inconvenience to such low houses.

622 Every ostrog is presided by a chief, called
554 *toyon*. This kind of magistrate is chosen
R from among the natives of the country,
177 by a plurality of voices. The Russians
.62 have preserved to them this priviledge, but the election must be approved by the jurisdiction of the province. This toyon is merely a peasant, like those whom he judges and governs; he has no mark of distinction, and performs the same labours as his subordinates. His office is chiefly to watch over the police, and inspect the execution of the orders of government. Under him is another Kamtschadale, chosen

29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

222 ſcrape off the ſkin; and then bind up ten ſtalks together.
252 When it begins to ſmell a little, then they put it in a bag to ſweeten; where it yields a ſweet duſt, which perhaps ſweats out from the pith of the plant. This herb-ſugar, as they call it, has ſomething the taſte of liquorice, and is not very pleaſant. A pood of the plant does not afford above a quarter of a pound of this duſt.

137 The women, when they gather this,[1] muſt wear gloves; for the
222 juice is ſo ſharp or cauſtic, than whenever it falls upon the fleſh it raiſes ſwellings and bliſters. For this reaſon, when in the ſpring the *Ruſſians* eat it freſh, they only bite it with their teeth, taking care not to touch it with their lips. I have ſeen inſtances of ſome that were unacquainted with this, who raſhly chewed it as they would do any other herb; upon which, not only their lips, but their chin, noſe, and cheeks, and alſo wherever the juice of this plant had touched, was immediately ſwelled up and full of bliſters; and although theſe burſt, yet the ſwelling continued for a whole week.

273 The manner of diſtilling ſpirits from it is as follows:—
556 They lay ſeveral bundles of this plant in a ſmall veſſel, upon which they pour hot water; and to make it ferment, they put in ſome berries of honey-ſuckle or cranberries, and binding the veſſel cloſe up ſet it in a warm place, where they leave it until the liquor ceaſes to make a noiſe; for during the time of fermentation, it cracks and bounces ſo much as to make the veſſel ſhake. In the ſame manner they prepare more wort in a large veſſel, and add to this, which now generally ferments in 24 hours, as above. They throw both the fermented herbs and liquor into the kettle, and cover it cloſe with a wooden cover; and inſtead of a pipe they take the barrel of a gun. The firſt running is as ſtrong as brandy; which, if they diſtil a ſecond time, produces a ſpirit ſo ſtrong that it conſumes even iron. But it is

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.]

is only the richer fort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. LINN. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliis pinnatifidis Linn. Cliff.

boil

6:Antropova E-4 (no date) 19-4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[796] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[793] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[764] The bodies of dead adults were given to the dogs to eat; children were
[756] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[799] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweetgrass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

/571 cont./

000 Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

K 177 192 174 325

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "silhse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

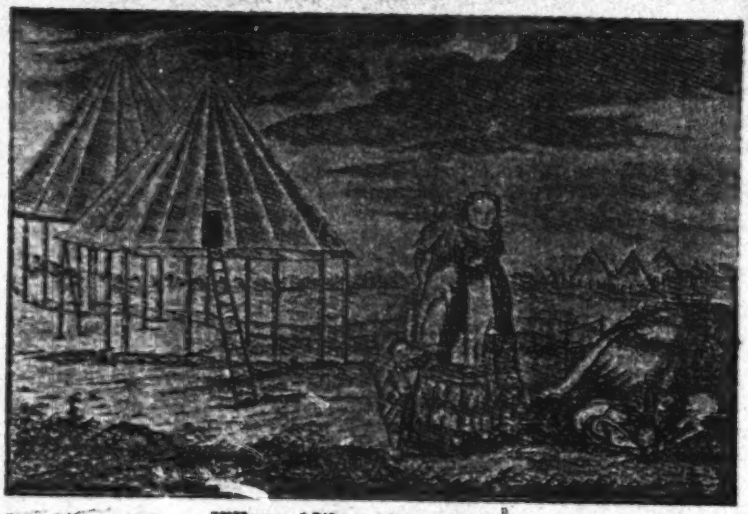
K 439 325 177 556 823 K 823 A 823 186 439

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 431
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 563
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3



Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

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7:Lesseps T-3 (1787-88)1790 Kamchadal

Those of winter are less singular; and if equally large, would exactly resemble the habitations of the Russian peasants. These have been so often described, that it is universally known how they are constructed and arranged. The isbas are built of wood; that is to say, the walls are formed by placing long trees horizontally upon one another, and filling up the interstices with clay. The roof slants like our thatched houses, and is covered with coarse grass, or rushes, and frequently with planks. The interior part is divided into two rooms, with a stove placed so as to warm them both, and which serves at the same time as a fire-place for their cookery. On two sides of the largest room, wide benches are fixed, and sometimes a sorry couch made of planks, and covered with bears skin. This is the bed of the chief of the family: and the women, who in this country are the slaves of their husbands, and perform all the

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7:Lesseps T-3 (1787-88)1790 Kamchadal

562 the moſt laborious offices, think themſelves
352 happy to be allowed to ſleep in it.

Beſides theſe benches and the bed, there is alſo a table, and a great number of images of different ſaints, with which the Kamtſchadales are as emulous of furniſhing their chambers, as the majority of our celebrated connoiſſeurs are of diſplaying their magnificent paintings.

342 The windows, as may be ſuppoſed, are
237 neither large or high. The panes are made of the ſkins of ſalmon, or the bladders of various animals, or the gullets of ſea wolves prepared, and ſometimes of leaves of talc; but this is rare, and implies a ſort of opulence. The fiſh ſkins are ſo ſcraped and dreſſed that they become tranſparent, and admit a feeble light to the room*;

* They produce an effect ſomewhat ſimilar to the oiled paper in the windows of our manufactories.

but

2: Schrenck--473 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3

/333 cont./

342 175 The next Paleo-Asiatic people, the Kamchadal, lived through the winter exclusively in earth yurts at the time of Steller and Krascheninnikof. One finds a detailed description by the two travelers and in Steller there is even a plan and a view of the interior (7). Apart from minor details in its interior arrangement

342 354 [191]

7. Steller, Beschr. von dem Lande Kamtschatka /Description of the Country of Kamchatka/, Frankfort and Leipzig, 1774, p. 212; Krasheninnikov", "Opis. zemli Kamchatki /A Description of Kamchatka/" Poln. sobr. uchen. putesh. po Rossii, izdav. Imp. Akad. Nauk", Vol. II, St. Petersburg, 1819, p. 37).

[113]

/334/ the Kamchadal earth-yurt showed an interesting deviation from the one of the Gilyak in that in it the outer, covered passageway leading to the door became a channel, which, with its interior opening directed toward the hearth in the middle of the yurt, served to produce a strong draft when a fire was made, but afterwards, when the fire had gone out, was closed at its outer end. According to Steller (1), only children were permitted

[417]

1. Op. cit., p. 214.

to crawl in and out of the yurt through this channel (2); the smoke

[114] [192] [562]

2. According to Krascheninnikof (op. cit., p. 40), also women and kojektschutsch or kojachttschitsch (Steller, op. cit. p. 351, note), i.e., men who behaved like women on the other hand, if a man had done it, he would have exposed himself to the derision of all those present. As a consequence of garbling the Kamchadal designation for the outer opening of this channel (schoponatsch), the Russian Cossacks call it shupan.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 *The Coast* extends from the *Bolscheretskoi* or Great River to the *Tegbil.*

Awatscha extends from the *Bolscheretskoi* to fort *Awatscha.*

Bobrovoi or *Beaver Sea* is the district round *Kamtschatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtschatka* to the *Tegbil.*

Ukoi is the eastern coast from the river *Ukoi.*

Tegbil is the western coast from the river *Tegbil.*

133 361 563 *Kamtschatka* is plentifully furnished with rivers; however they are so little that none of them are navigable by the smallest vessels, except the river *Kamtschatka*, which will carry small vessels 200 versts upwards from its mouth. Into this river it is reported that some *Russians* were brought by sea, long before its subjection to *Russia.* It is at present called *Theodotoshine*, from the chief of those people thrown a-shore, whose name was *Theodot.* Next to this, the most considerable rivers are, the *Bolschaia-reka*, or Great River, *Awatscha* and *Tegbil*; upon which the *Russians* have set-
133 tlements. *Kamtschatka* is likewise very well furnished with lakes, particularly about the river of that name, where they are so numerous that there is no passage over land in the summer-time. Some of them are very large: the most considerable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtschatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilskoy*, out of which runs the river *Ofernoi.*

133 712 R 177 .71 The river *Kamtschatka* rises in a marshy ground, and first runs north-east; then inclines more to the east, and turning at once towards the south-west, falls into the ocean in 56° 30′ north latitude. From its source to its mouth, in a strait line, is 496 versts; but the length of its course, according to the exactest computation, is about 525 versts; during which it receives into it many brooks and rivers. About two versts from its mouth, upon the right side, are three deep bays. There are several forts built along the banks of this river by the *Russian* Cossacks, to

awe

361 different buildings; the entrance into the fort is by a ſmall
563 gate on the weſt ſide. Beyond the fort was a chapel, now con-
R verted into a church conſecrated to St. Nicholas, with a belfry
177 upon pillars. There are about 30 houſes of inhabitants, one pub-
.71 lick houſe for ſelling brandy, and a diſtillery. There are about 45 Coſſacks; and though their children pay the common head tax, yet 14 of them do duty with the other Coſſacks. This fort is the weakeſt of all; but they ſeem to be very ſecure, as the neighbouring *Kamtſchadales* were almoſt the firſt that ſubmitted,
361 and have always been faithful, and lived peaceably. With re-
R gard to its ſituation it has great advantages: firſt, all veſſels that
177 come by ſea can come into the Great river, from which they
.71 receive their goods at the firſt hand: ſecondly, they receive great profits from the perſons that arrive there, whom they furniſh with lodging and board: thirdly, they are great gainers by the tranſporting goods from thence to the other forts: fourthly, they have a better opportunity than the others of getting *Kamtſchatka* beavers, which is now reckoned a principal commodity: fifthly,
132 in the ſummer they have the greateſt plenty of fiſh, which they
136 catch with little trouble and expence; for this reaſon the commander in chief of all the *Kamtſchatka* forts generally lives here, ſending out deputies to the others. The only diſadvantage they have is, that in the ſummer, during the time of fiſhing, they are very ſubject to rainy weather, which ſpoils a great many of their
137 fiſh, and thereby reduces them to great difficulties for food. If this river was furniſhed with wood ſufficient the difficulty might be removed, as inſtead of drying them in the ſun they might ſmoke them, as the inhabitants of *Ochotſka* do. But this is impracticable becauſe of the diſtance of the wood, and the trouble of bringing it down. It is ſo ſcarce here, that what they abſolutely muſt have for the boiling of ſalt and train oil, they are forced to provide at the diſtance of three days' journey, and can bring no more than will ſerve to make 40 pounds of ſalt.

The

The upper fort of *Kamtſchatka* was the firſt built, and for ſome years reckoned the principal, as the chief commiſſary lived there. It ſtands upon the left bank of the *Kamtſchatka*, near the mouth of the little *Kaly*, about 69 verſts from the riſe of the *Kamtſchatka*, 242 verſts in the ſtraight road from the *Bolſcheretſkoi* fort. It is 17 fathom ſquare; the gate fronts the river, and over it is a warehouſe. Within the fort is the office for receiving the taxes, a room for keeping the hoſtages, and two magazines. Without the fort is a church conſecrated to St. *Nicholas*, the commiſſary's houſe, a publick houſe, diſtillery, and 22 private houſes for the accommodation of the garriſon, which conſiſts of 56 Coſſacks. This fort has the advantage of the *Bolſcheretſkoi*, the weather being here generally pretty good, and the wood, though only poplar, can be procured with little trouble, and is ſo large and ſubſtantial that it is very uſeful for building: beſides the ſoil is better here, being much fitter for agriculture than any of the other parts. The fiſhery is indeed very poor, being at ſuch a diſtance from the ſea. The fiſh come up in ſmall numbers, and ſo very late, that the inhabitants of the *Niſhnaſhaltalſki* fort make all their winter proviſion before they begin to fiſh in the upper fort; ſo that almoſt every ſpring there is a ſcarcity of proviſions. Their ſalt and train oil they either buy from the inhabitants of the lower fort, or, notwithſtanding the great diſtance, they go themſelves and boil it at the mouth of the river *Kamtſchatka*, which is 400 verſts from the upper fort. Formerly they uſed to have great plenty of ſea beavers in the Beaver Sea, but at preſent very few of them are caught; ſo that the inhabitants have their only hope of ſupport from agriculture, to which if they apply themſelves, they may expect more profit than from any commerce with the natives; and, if they neglect it, it will be impoſſible for them to live there.

The lower *Kamtſchatka* fort is 397 verſts diſtant from the upper fort, and ſtands upon the ſame ſide of the river, about 30 verſts

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

chatka expedition upon the haven of *Petropaulauſkay*. Its great beauty is its church, which is finely ſituated, and very well built. This fort has almoſt the ſame advantages and diſadvantages as the *Bolſcheretſkoi* fort, with this difference, that here the hunting of the beaver is more convenient; but the water is bad and unwholſome, ſo that they ſend frequently from this bay to the river *Awatſcha* for their freſh water.

We can give no account of the fifth fort, which was built upon the river *Tegbil* after my departure from *Kamtſchatka*. It was garriſoned with 37 male inhabitants. Mr. *Steller* tells us, that this fort was built with a view to reſtrain the ſettled *Koreki*, and for a ſtage to thoſe who travel round the *Penſchinſka* ſea to *Ochotſka*; and, in caſe of neceſſity, to protect the rein-deer or wandering *Koreki* againſt the *Tchukotſkoi*. The inhabitants of this fort can deprive thoſe of the lower *Kamtſchatka* fort of ſeveral advantages, becauſe they lie more convenient for hunting the ſable upon the river *Tegbil*, and the *Koreki* rather chuſe to bring their goods to them than to the two other forts, as being nearer.

CHAP. VI.

Of the Manner in which the Coſſacks live there; of their DISTILLERY, PROVISIONS, *&c.*

THE Coſſacks of *Kamtſchatka* live almoſt in the ſame manner as the natives, feeding like them upon roots and fiſhes; and their occupations are nearly the ſame. In the ſummer they catch fiſh for their winter proviſion, and gather nettles, of which they make nets. Their difference only ſeems

563 to consist in this, that the Cossacks live in houses, and the natives in huts under ground; the Cossacks usually eat their fish boiled, and the natives mostly dry; besides, the Cossacks dress their's several ways different from the natives. As it is impossible for people to live there without the help of women, who are so necessary in many parts of their work, such as cleaning their fish, drying their roots, spinning and making their shirts and cloaths, and as the Cossacks first settled in *Kamtschatka* without their wives, whom upon account of the difficulty of the journey they could not transport thither, I shall now relate what methods they used to make up for this deficiency.

144 One may easily imagine, that the Cossacks did not reduce these
563 people without using force; and in these wars they took pri-
177 soners many women and children as well as men, and obliged
567 them to perform all the labour. The care of overlooking these servants was entrusted to such as they made their concubines, whom they frequently married if they had any children by them; and sometimes the natives offered them their daughters, whom they promised to marry as soon as the priest arrived: so that it sometimes happened that the Cossacks had a marriage and christening at the same time; for then there was but one priest in all *Kamtschatka*, who lived in the lower fort, and once in a year, or once in two years, visited the other settlements.

563 The Cossacks, a people rude enough themselves, seemed to be
567 pretty well pleased with the manner of living here, using the natives as their slaves, who furnished them with sables and other furrs in abundance, and passing the greatest part of their time in playing at cards: their only want seemed to be that of brandy. Before there were any brandy shops they used to meet in the office where the tax was received: here the gamesters brought their furrs, and, when they had no furrs, even their slaves; and

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

and ſometimes they played 'till both parties had pawned their 563
cloaths for brandy. Such way of living, one may eaſily believe, 567
was attended with great confuſion; but what the poor ſlaves ſuf-
fered is almoſt incredible, being obliged ſometimes to change
their maſters twenty times a day.

The invention of making ſpirits happened accidentally. The 563
Coſſacks, after the manner of the natives, made a great proviſion
of all kinds of berries for the winter. It happened ſometimes
that they began to ferment in the ſpring, and could be uſed no
other way than in drink. This drink was obſerved to cauſe
drunkenneſs when taken in great quantities; upon which they
began to diſtil it, and, to their great ſurpriſe and pleaſure,
found that it produced a good ſpirit. They have ſince diſco-
vered that they could make brandy from an infuſion of the
ſweet graſs, and now they have ſpirits in plenty. Their method
of preparing this herb for diſtillery we have already explained.

Thoſe that are curious to know whence the Coſſacks ſettled 563
here obtained their riches, muſt be informed that they owe them 661
to the following circumſtances: firſt, when they conquered the 651
natives they made all the plunder they could: ſecondly, every 439
party of Coſſacks, that was employed in gathering the taxes, R.
obliged each tributary native, beſides the crown tax, to give them 177
four fox-ſkins and one ſable, which they divided among them- 65
ſelves: thirdly, by their commerce with the natives, whom they
obliged to pay a very high price for every trifle they furniſhed
them with. Although, at preſent, the Coſſacks are forbidden
to take any thing more than the crown tax, yet they are ſtill
allowed to ſet what price they pleaſe upon their goods; and
indeed they ſell them, or change them for furrs, at very great
profits, and ſometimes for proviſions, nets, and boats. Without
this they would not be able to live upon their ſmall pay, which 563
is no more than what they uſed to receive at *Jakutſki*, and,
both in money and proviſions, does not amount to above 14
rubles

rubles a year; and here they cannot maintain and cloath themselves for less than 40.

CHAP. VII.

Of their TRADE.

ALTHOUGH from the very beginning some people went along with the tax-gatherers, who carried little trifles to dispose of among the natives, these people could not be called merchants, because they did duty in the same manner as the Cossacks. By degrees many of them got themselves enrolled under that name, on paying the poll-tax, and as such settled with their families in these places; but the true merchants began to bring considerable quantities of goods first to *Ochotska*, and then to *Kamtschatka*, at the time when the second expedition to *Kamtschatka* took place. The number of the people increasing made the demand greater; and their profits were so considerable, that several, who came out of *Russia* as common labourers, in six or seven years began to trade for 15000 rubles or more: but, on the other hand, some were ruined from their extraordinary gains, which led them into various sorts of luxury and extravagance: and those merchants particularly who sent factors thither run the greatest risk; however, the principals had the satisfaction to find that the government took care to see justice done them.

After the expedition to *Kamtschatka* the trade began to be upon another footing, the officers and servants in this expedition buying their goods of the merchants for ready money; whereas they were obliged to give the inhabitants credit 'till they returned from their travelling among the *Kamtschadales*, when they were paid

paid in furrs of different ſorts. In fine, the exchange of goods 569
with the *Kamtſchadales* and *Chineſe* is ſo profitable, that, not- 441
withſtanding all expences occaſioned by the diſtance, dearneſs of
tranſport, and other difficulties, we may reckon that a 1000
rubles will produce 4000, provided they remain but one year in
Kamtſchatka; but if they remain longer, there is a conſiderable
loſs. The reaſons of this are, firſt, that upon their arrival, being
flattered with the high prices of things, they ſell every thing, even
their own cloaths and proviſions, hoping ſoon to leave the country,
in which if diſappointed, they are obliged to buy them back
again at double price: ſecondly, that the furrs by lying, loſe their
colour and value: thirdly, that the place is exceſſively expenſive
in regard to lodging, warehouſe-room, victuals, and ſeveral other
particulars.

Goods demanded in *Kamtſchatka*, beſides the natural produce 439
of *Ruſſia*, are *European* goods, from *Siberia*, *Bobaria*, and the
Calmuks. From *Europe* they receive coarſe cloaths of various
colours, linen, ſerges, knives, ſilk and cotton handkerchiefs,
red wine, a little ſugar, tobacco, and ſeveral toys. From
Siberia, iron, ſeveral iron and copper veſſels, and inſtruments,
ſuch as knives, hatchets, ſaws, and fire-ſteels; alſo wax, hemp,
yarn for nets, tanned deer-ſkins, coarſe *Ruſſian* linen and cloth.
From *Bobaria*, and the country of the *Calmuks*, they bring ſe-
veral different ſorts of cotton goods. From *China*, ſeveral ſilk
and cotton ſtuffs, tobacco, coral, and needles, which are much
preferred to thoſe from *Ruſſia*. From the *Koreki* they receive
great quantities of rein-deer-ſkins, both dreſſed and undreſſed,
which they may ſell in what quantities they pleaſe at any
time. Merchants muſt take care not to have too great a ſtock 437
of any other goods; for the inhabitants of this place, *Ruſſians* 511
as well as natives, never buy any thing before they are in abſolute
want of it, even if they could buy it at half price.

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5: Jochelson A-5 (1910-11) 1928 Kamchadal

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The Russian Government repeatedly tried to introduce agriculture and gardening into Kamchatka. For this purpose peasants from Southern Siberia and European Russia were transferred several times to Kamchatka, but all experiments have failed and the imported husbandmen turned to fishing and hunting. Only in the valley of the Kamchatka River, near the village Kluchevskoye, small sowings of barley are still being made, but without any economic importance.

Experiments with gardening appeared to be more successful. Potatoes grow all over Southern Kamchatka where the digging of edible roots had almost ceased. Turnips grow there and the inhabitants of Kluchevskoye also grow cabbage, which heads well.

CLIMATE OF KAMCHATKA

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The following data on the climate of the Kamchatka Peninsula are based on observations made in 1908–1909 by the members of the Meteorological Division of the Riaboushinsky Expedition headed by Dr. V. A. Vlasov.[1]

As climate is one of the most effective nature-agents regulating human life, data concerning three chief regions of the country will be given: the western coast, the eastern coast and the central part, represented chiefly by the valley of the Kamchatka River. The western and the eastern shores represent maritime climates, while the climate of the central part may be characterized as a continental one.

The climate of the western coastline of Kamchatka is more severe than that of the eastern, due to the cold Okhotsk Sea. During the winter cold winds prevail, blowing from the Siberian continent, the region of the great Siberian anticyclone. A late spring and a cold summer characterize the climate of the western coast. On the eastern shore of Kamchatka, under the moderating influence of the Pacific Ocean, frosts in the winter are not so severe. Rain and snowfall are more abundant. However, the cold current arriving from the Bering Strait and the amount of ice which it brings delay the beginning of summer and reduce its temperature.

The climate of the central Kamchatka, confined by its western and eastern mountain ridges, i. e., the valley of the Kamchatka River, distinguishes itself by all the peculiarities of a continental climate, having a cold winter and a comparatively warm summer. In order to demonstrate what has been said of the three climatic regions, mean annual figures for three points are given: for Tighil on the western shore, Petropavlovsk on the eastern shore and Kluchevskoye in the valley of the Kamchatka River.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
Tighil	−20.0	−19.8	−13.6	−2.2	2.4	6.2	11.5	12.1	7.0	−1.0	−7.4	−17.2	−3.5
Petropavlovsk	−10.9	−11.2	− 7.0	−1.6	3.1	7.9	11.8	13.5	9.8	4.2	−1.8	− 6.6	1.0
Kluchevskoye	−16.4	−15.2	−11.2	−1.5	4.6	8.5	12.15	13.1	8.8	−1.4	−7.8	−13.0	−2.0

[1] See V. A. Vlasov, The Kamchatka Expedition of F. P. Riaboushinsky organized by the Imperial Russian Geographical Society, Meteorological Division, vol. 1, part 1, *On the Climate of Kamchatka*; part 2, on *The Temperature of the Waters*. Moscow, 1916 (in Russian). Centigrade thermometers were used.

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

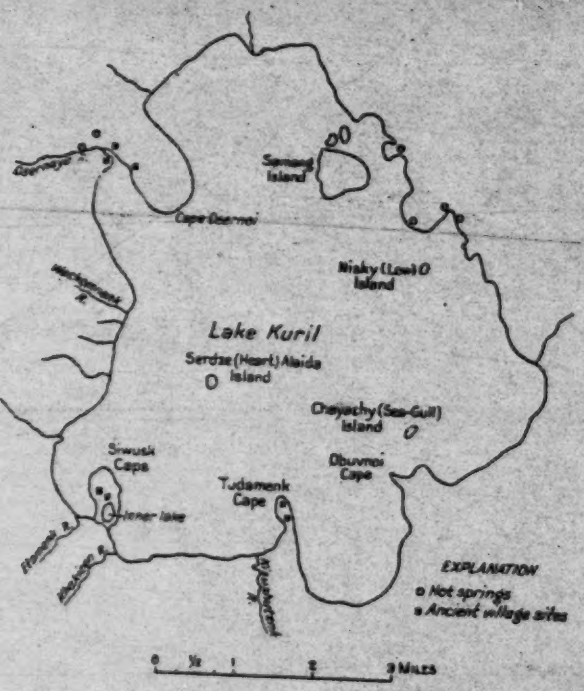
In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
● 563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

167 seas, the Okhotsk, and the severest of climates. The factories were closed for the
● 563 eight winter months, but the summer was very busy. Scores of laborers were
228 brought on the company's steamers from the Amur River. Not all the necessary
464 structures were ready at that time, and the imported laborers slept under the cover of primitive shades. Mountains of salt lay in the open, melting from rains. A part of the laborers were busy preparing a kind of caviar from the roe of



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228 salmon. After taking out the roe they threw overboard the split fish, causing an enormous waste of food-material. The laborers in the saltery and cannery threw out from their seines all other fish than salmon, and from the latter the hump-back salmon, which was not in favor with the foreman of the plant.

182 From information gathered before my trip to the lake I knew that there were several pits of ancient dwellings (see the map of the Kuril Lake). The natives
000 have either died out or were exterminated by the Russian conquerors. My party

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Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
331 barns or sheds and provided some supplementary fodder in winter. How-
ever, the milk yield was very low, and livestock mortality was high.
[493] From the Russians, the Itel'mens obtained improved means of pro-
175 duction: firearms, nets, etc. Stone and bone implements were completely
177 abandoned in favor of metal ones. Russian clothing and utensils began to
648 come into use. The primitive semidugout was gradually (and by the begin-
ning of the 19th century, completely) replaced by wooden board dwellings,
and occasionally by log houses of the Russian type. Simultaneously with the
absorption of Russian culture by the Itel'mens, a reverse process was also
taking place in the 18th and 19th centuries. Soldiers, Cossacks and
[563] peasants, who were systematically being resettled on the peninsula after
the middle of the 18th century, married Itel'men women and acquired some
elements of their way of life and culture. The result was that peculiar
population of the peninsula which became known, as we have pointed out
earlier, under the name of Kamchadals and was often mistakenly classified
as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
331 spawning runs caused almost annual failures of the native catch and led to
inevitable famines.

175 Contemporary Life of the Itel'mens

648 During the civil war in the Far East, the Itel'mens actively helped the
guerrilla units, and later the Red Army troops, in liquidating the White
bands. The guerrilla units included many residents of the villages of Napana,
Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly
established on the peninsula, and the reconstruction of the economy was
launched.

7:Lesseps T-3 (1787-88)1790 Kamcnadal

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be built upon the ſite of the old hoſpital; that is, between the port and the lake. A battery alſo was to be erected upon the neck of land which ſeparates the bay from the lake, in order to protect the other part of the town. In ſhort, by this plan, the entrance of the bay would be defended by a ſufficiently ſtrong battery upon the leaſt elevated point of the left coaſt; and veſſels entering the bay could not eſcape the cannon, becauſe of the breakers on the right. There is at preſent upon the point of a rock, a battery of ſix or eight cannon, lately erected to ſalute our frigates.

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I need not add, that the augmentation of the garriſon forms a part of the plan, which conſiſts only at preſent of forty ſoldiers, or Coſſacs. Their mode of living and their dreſs are ſimilar to the Kamtſchadales, except that in time of ſervice they have a ſabre, firelock, and cartouch box; in other

reſpects

7:Lesseps T-3 (1787-88)1790 Kamchadal

563 respects they are not distinguishable from the indigenes, but by their features and idiom.

161 361 With respect to the Kamtschadale village, which forms a considerable part of the place, and is situated, as I have already said, upon the narrow projection of land which closes in the entrance of the port, it is at present composed of from thirty to forty habitations, including winter and summer ones, called *isbas* and *balagans*; and the number of inhabitants, taking in the garrison, does not exceed a hundred, men, women and children. The intention is to increase them to upwards of four hundred.

13 To these details respecting the port of St. Peter and St. Paul, and its destined improvements, I shall add a few remarks upon the nature of the soil, the climate, and the rivers.

7:Lesseps T-3 (1787-88)1790 Kamchadal

000very common at this ſeaſon, it is not be wondered at that ſhipwrecks are ſo frequent on theſe coaſts: the veſſels are ſo ſmall as to have but one maſt; and, what is ſtill worſe, the ſailors who manage them, if report may be credited, have too little ſkill to be confided in.

The next day we reſumed our journey, and arrived at Bolcheretſk in the duſk of the evening.

As I forſee that my ſtay here will probably be long, from the neceſſity of waiting till ſledges can be uſed, I ſhall proceed with my deſcriptions, and the recital of what I have ſeen myſelf, or learned from my converſations with the Ruſſians and
361 Kamtſchadales. I ſhall begin with the
563 town, or fort of Bolcheretſk, for ſo it is called, in Ruſſia (*oſtrog*, or *krepoſt*).

It is ſituated on the border of the Bol-

chaïa-

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361 chaïa-reka, in a ſmall iſland formed by dif-
563 ferent branches of this river, which divide the town into three parts more or leſs inhabited. The moſt diſtant diviſion, and which is fartheſt to the eaſt, is a kind of ſuburb called *Paranchine*; it contains ten or twelve iſbas. South eaſt of Paranchine, is the middle diviſion, where there is alſo a number iſbas, and among others, a row of wooden huts that ſerve for ſhops. Oppoſite to theſe is the guard-houſe, which is alſo the chancery, or court of juſtice*; this houſe is larger than the reſt, and is always guarded by a centinel. A ſecond branch of the Bolchaïa-reka again ſeparates, by a very narrow ſtream, this group of habitations, built without order, and ſcattered here and there, from another at the north-weſt, nearer the river. The river in this part flows in the

* This guard-houſe is likewiſe uſed as a priſon, and even as a ſchool for children. The maſter of the ſchool is a Japaneſe; he is ſkilled in many languages, and is paid by government for inſtructing the children of this country.

direction

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361 direction of ſouth-eaſt and north-weſt, and
563 paſſes within fifty yards of the governor's houſe. This houſe is eaſily diſtinguiſhed from the reſt; it is higher, larger, and is built like the wooden houſes of St. Peterſburg. Two hundred yards north-eaſt of this houſe, is the church; the conſtruction of which is ſimple, and like that of the village churches in Ruſſia. By the ſide of it is an erection of timber work, twenty feet high, covered only with a roof, under which three bells are ſuſpended. North-weſt of the governor's houſe, and ſeparated from it by a meadow or marſh about three hundred yards wide, is another group of dwellings, conſiſting of twenty-five or thirty iſbas, and ſome balagans. There are in general very few of theſe latter habitations at Bolcheretſk; the whole do not exceed ten; the iſbas and wooden houſes, without including the eight ſhops, the chancery, and the governor's houſe, amount to fifty or ſixty.

From

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From this minute deſcription of the fort of Bolcheretſk, it muſt appear ſtrange that it retains ſo inapplicable a name; for I can affirm, that no traces are to be found of fortifications, nor does it appear that there has ever been an intention of erecting any. The ſtate and ſituation, both of the town and its port, induce me to believe, that government have felt the innumerable dangers and obſtacles they would have to ſurmount, if they were to attempt to render it more flouriſhing, and make it the general depôt of commerce to the peninſula. Their views, as I have already obſerved, ſeem rather turned to the port of Saint Peter and Saint Paul, which for its proximity, ſafety, and eaſy acceſs, merits the preference.

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There is a degree of civilization at Bolcheretſk, which I did not perceive at Petropavlofska. This ſenſible approach to European manners, occaſions a ſtriking differ-

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563 rence between the two places. I ſhall endeavour to point out and account for this as I proceed in my obſervations upon the inhabitants of theſe oſtrogs; for my principal object ſhould be, to give details of their employments, their cuſtoms, their taſtes, their diverſions, their food, their underſtandings, their character, their conſtitutions, and laſtly, the principles of government to which they are ſubjected.

The population of Bolcheretſk, including men, women and children, amounts to between two and three hundred. Among theſe inhabitants, reckoning the petty officers, there are ſixty or ſeventy Coſſacs, or ſoldiers, who are employed in all labours that relate to the ſervice of government *. Each in his turn mounts guard; they clear the ways; repair the bridges; unlade the

* Their pay is ſo inconſiderable, that the receipt of a whole year would not ſuffice to maintain them for a ſingle month, if they had not the reſource of a petty fraudulent commerce, of which I ſhall preſently give an account.

provisions

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563 provifions ſent from Okotſk, and convey them from the mouth of the Bolchaïa-reka to Bolcheretſk. The reſt of the inhabitants are compoſed of merchants and ſailors.

563 437 273 Theſe people, Ruſſians and Coſſacs, together with a mixed breed found among them, carry on a clandeſtine commerce, ſometimes in one article, and ſometimes in another; it varies as often as they ſee any reaſon for changing it; but it is never with a view of enriching themſelves by honeſt means. Their induſtry is a continual knaviſhneſs; it is ſolely employed in cheating the poor Kamtſchadales, whoſe credulity and inſuperable propenſity to drunkenneſs, leave them entirely at the mercy of theſe dangerous plunderers. Like our mountebanks, and other knaves of this kind, they go from village to village to inveigle the too ſilly natives: they propoſe to ſell them brandy, which they artfully preſent to them

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to taste. It is almost impossible for a Kamtschadale, male or female, to refuse this offer. The first essay is followed by many others; presently their heads become affected, they are intoxicated, and the craft of the tempters succeed. No sooner are they arrived to a state of inebriety, than these pilferers know how to obtain from them the barter of their most valuable effects, that is, their whole stock of furs, frequently the fruit of the labour of a whole season, which was to enable them to pay their tribute to the crown, and procure perhaps subsistance for a whole family. But no consideration can stop a Kamtschadale drunkard; every thing is forgotten, every thing is sacrificed to the gratification of his appetite, and the momentary pleasure of swallowing a few glasses of brandy*, reduces

* This is well known to be the ruling passion of all the people of the north; but I have had more than one occasion to observe, that the Kamtschadales are inferior in this respect

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duces him to the utmoſt wretchedneſs. Nor is it poſſible for the moſt painful experience to put them on their guard againſt their own weakneſs, or the cunning perfidy of theſe traders, who in their turn drink,

reſpect to none of them. The following ſtory, among others, was told me, that I might be able to judge of the rapacity of theſe vagabond traders, and the ſtupid prodigality of their dupes.

A Kamtſchadale had given a ſable for a glaſs of brandy. Inflamed with a deſire of drinking another, he invited the ſeller into his houſe. The merchant thanked him, but ſaid he was in a hurry. The Kamtſchadale renewed his ſolicitations, and propoſed a ſecond bargain: he prevailed.—" Come, another glaſs for this ſable, it is a finer " one than the firſt.—No; I muſt keep the reſt of my " brandy; I have promiſed to ſell it at ſuch a place, and I " muſt be gone.—Stay a moment; here are two ſables.— " Tis all in vain.—Well, come, I will add another.— " Agreed, drink." Meanwhile the three ſables are ſeized, and the hypocrite makes a freſh pretence to come away: his hoſt redoubles his importunities to retain him, and demands a third glaſs: further refuſals and further offers: the higher the chapman raiſes his price, the more the Kamtſchadale is prodigal of his furs. Who would have ſuppoſed that it would have ended in the ſacrifice of ſeven moſt beautiful ſables for this laſt glaſs! they were all he had.

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177 The inhabitants of Bolcheretſk differ not
291 from the Kamtſcadales in their mode of
563 living; they are leſs ſatisfied, however, with balagans, and their houſes are a little cleaner.

Their clothing is the ſame. The outer garment, which is called *parque*, is like a waggoner's frock, and is made of the ſkins of deer, or other animals, tanned on one ſide. They wear under this long breeches of ſimilar leather, and next the ſkin a very ſhort and tight ſhirt, either of nankin or cotton ſtuff; the women's are of ſilk, which is a luxury among them. Both ſexes wear boots; in ſummer, of goats or dogs ſkins tanned; and in winter, of the ſkins of ſea wolves, or the legs of rein deer*. The men conſtantly wear fur caps; in the mild ſeaſon they put on longer ſhirts of nankin,

439 * Articles of apparel made of the ſkins of rein deer are procured from the Koriacs.

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177 or of ſkin without hair; they are made like
291 the parque, and anſwer the ſame purpoſe,
563 that is, to be worn over their other garments. Their gala dreſs, is a parque trimmed with otter ſkins and velvet, or other ſtuffs and furs equally dear. The women are clothed like the Ruſſian women, whoſe mode of dreſs is too well known to need a deſcription; I ſhall therefore only obſerve, that the exceſſive ſcarcity of every ſpecies of ſtuff at Kamtſchatka, renders the toilet of the women an object of very conſiderable expence: they ſometimes adopt the dreſs of the men.

262 The principal food of theſe people con-
462 ſiſts, as I have already obſerved, in dried
222 fiſh. The fiſh are procured by the men, while the women are employed in domeſtic occupations, or in gathering fruits and other vegetables, which, next to the dried fiſh, are the favourite proviſions of the Kamt-

ſchadales

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252 439 273 when they use it in their ragouts, it is previously boiled. Brandy is also distilled from this sweet herb, which, as I observed before, is sold on account of government: for this purpose the plant is purchased of the Kamtschadales*.

162 563 There are three sorts of inhabitants, the natives or Kamtschadales, the Russians and Cossacs, and the descendants from intermarriages.

The indigenes, that is, those whose blood is unmixed, are few in number; the small pox has carried off three fourths of them, and the few that are left are dispersed through the different ostrogs of the peninsula; in Bolcheretsk it would be difficult to find more than one or two.

* This brandy intoxicates much quicker than French brandy; whoever drinks it, is sure to be extremely agitated during the night, and to feel the next day as melancholy and restless as if he had committed some crime.

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515 trary extreme. Notwithſtanding this care-
157 leſſneſs, and other natural defects, it muſt be regretted that their number is not more conſiderable; as, from what I have ſeen, and what has been confirmed to me by different perſons, if we would be ſure of finding ſentiments of honour and humanity in this country, it is neceſſary to ſeek for them among the true Kamtſchadales; they have not yet bartered their rude virtues for the poliſhed vices of the Europeans ſent to civilize them.

177 It was at Bolcheretſk that I began to per-
563 ceive the effects of their influence. I ſaw the trace of European manners, leſs in the mixture of blood, in the conformation of features, and the idiom of the inhabitants, than in their inclinations and mode of life, which did not always diſcover any very conſiderable fund of virtue. This ſtriking difference between the inhabitants and

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563 the indigenes, ſprings, in my opinion, from the difficulties which lie in the road to civilization, and I will aſſign my reaſons.

Bolcheretſk, not long ago, was the chief place of Kamtſchatka, particularly as the governors had thought proper to eſtabliſh their reſidence there. The chiefs and their ſuites introduced European knowledge and manners: theſe, it is known, generally become adulterated in tranſmiſſion, according to the diſtance from the ſource. Meanwhile it is to be preſumed that the Ruſſian government was careful, as far as it was poſſible, to confide its authority and the execution of its orders, only to officers of acknowledged merit, if I may judge from thoſe who are at preſent employed; and it is therefore to be ſuppoſed that theſe officers, in the places of their reſidence, were ſo many examples of the virtues, the acquirements, and all the eſtimable qualities of

civilized

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civilized nations. But unfortunately the leſſons which thy gave, were not always ſo efficacious as might have been expected; either becauſe being only ſketches, they were not ſufficiently felt, or rather, not being imbibed in all their purity, they made but momentary or perhaps vicious impreſſions on the mind.

Theſe reformers found not the ſame zeal either in the Coſſacs who compoſed the garriſon, or in the merchants and other Ruſſian emigrants who ſettled in the peninſula. The diſpoſition to licenciouſneſs, and the deſire of gain, which the firſt conquerors of a country almoſt always bring with them, and the continual development of theſe qualities, by the facility with which the natives may be duped, contributed to check the progeſs of reform. The fatal infection was ſtill more diffuſely ſpread by intermarriages, while the ſeed of the ſocial

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177 virtues, which had been attempted to be
563 ſown, ſcarcely found a reception.

The conſequence has been, that the natives, or true Kamtſchadales, have preſerved almoſt univerſally their ignorant ſimplicity and uncultivated manners; and that a part of the reſt of the inhabitants, Ruſſians and mixed breed, who have ſettled themſelves in the oſtrogs where the governors reſide, ſtill retain indeed a faint ſhade of European manners, but not of ſuch as are moſt pure. We have already had a proof of this in what has been ſaid of their commercial principles, and my conviction has been rendered ſtronger during my abode at Bolcheretſk, by a cloſer ſtudy of the inhabitants, who, this faint ſhade excepted, differ little from the indigenes.

157 M. Kaſloff, and thoſe who accompanied
563 him, in imitation of his example, frequently
177 give

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157 give entertainments or balls to the ladies of
563 this oſtrog, who accept ſuch invitations with
177 equal alacrity and joy. I had an opportunity of ſeeing that what I had been told was true; that theſe women, the Kamtſchadales as well as the Ruſſians, have a ſtrong propenſity to pleaſure; their eagerneſs indeed is ſo great, that they are unable to conceal it. The precoſity of the girls is aſtoniſhing, and ſeems not at all to be affected by the coldneſs of the climate.

177 With reſpect to the women of Bolche-
563 retſk, who were preſent at theſe aſſemblies, and who were chiefly either of mixed blood or of Ruſſian parents, their figures in general did not appear diſagreeable, and I perceived ſome who might be conſidered as handſome: but the freſhneſs of youth is not of long duration; from child-bearing, or the painful labours to which they are ſubjected, it fades away almoſt in the flower

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of their age. Their disposition is extremely cheerful; a little, perhaps, at the expence of decency. They endeavour to amuse the company by every thing which their gaiety and playfulness can furnish. They are fond of singing, and their voice is pleasant and agreeable; it is only to be wished that their music had less resemblance to their soil, and approached nearer to our own. They speak both the Russian and Kamtschadale languages, but they all preserve the accent of the latter idiom. I little expected to see in this part of the world Polish dances, and still less country dances in the English taste; but what was my surprise to find that they had even an idea of a minuet! Whether my abode for twenty six months upon the sea, had rendered me less fastidious, or that the recollections they revived facinated my eyes, these dances appeared to be executed with tolerable precision, and more grace than I could have imagined.

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177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
152 ſive. I ſhall finiſh this account with a re-
837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

533 The entertainments and aſſemblies of the
535 native Kamtſchadales, at which I was alſo

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000 ſenſible of his paſt ſufferings, or weary of his preſent ſituation.

361/563 Our ſtay at Vercknei was ſhort; we ſet out after dinner in order to ſleep at Milkovaïa-Derevna, otherwiſe called the village of Milkoff, which was at the diſtance of fifteen werſts. In our way we paſſed a tolerably large field incloſed with palliſades, and farther on a *zaimka*, that is, a hamlet inhabited by labourers. Theſe labourers were Coſſacs, or Ruſſian ſoldiers, employed in the cultivation of land on government account. They had eighty horſes belonging to the crown, and which equally anſwer the purpoſes of induſtry, and of the ſtud eſtabliſhed in this place for the propagation of animals ſo uſeful and ſo ſcarce in the peninſula. About five hundred yards from this hamlet, which is called Iſchigatchi, upon an arm of the Kamtſchatka, is a water mill built of wood, but not very large. No uſe could at pre-

ſent

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563 ſent be made of it. The ſwell of water had been ſo great as to overflow the ſluice, and to ſpread itſelf over a part of the plain where it was frozen. The ſoil appeared to be good, and the country round it to be very pleaſant. I queſtioned the Coſſacs upon the productions of their canton, where I conceived every ſpecies of corn might be cultivated with ſucceſs. They told me that their laſt harveſt had, both in quantity and quality, ſurpaſſed their hopes, and was not inferior to the fineſt harveſts in Ruſſia; two pouds of corn had produced ten.

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Arrived at Milkoff, I was aſtoniſhed no longer to ſee either Kamtſchadales or Coſſacs, but an intereſting colony of peaſants whoſe features and addreſs told me they were not a mixed breed. This colony was ſelected in 1748, partly in Ruſſia and partly in Siberia, among the primitive inhabitants, that is, among the huſbandmen. The view

of

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of administration, in sending them into this country was, that they might clear the land and make experiments in agriculture; hoping that their example and success would instruct and encourage the indigenes, and induce them to employ their labours in this advantageous and necessary art. Unfortunately their extreme indolence, which I have already described, little corresponded with the wise intentions of government; and so far are they from pretending to any rivalship, that they have never derived the smallest advantage from the examples that are before their eyes. This extreme sluggishness of the natives is the more painful to an observer, as he cannot but admire the industry of these active emigrants, whose labours have been attended with such beneficial effects. Their habitations, situated upon the Kamtschatka, seem to shew that they live at their ease. Their cattle thrive well from the great care they take of them.

I observed

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I obſerved alſo that theſe peaſants had in general very much the air of being contented with their ſituation. Their labour is profitable, and not exceſſive. Every man plows and ſows his field, and having only his capitation to pay, he reaps abundantly the fruit of his exertions, which a fertile ſoil repays him with uſury. I am convinced that greater advantages might be derived from this ſource, if the cultivators were more numerous. The harveſt conſiſts chiefly of rye, and a very ſmall quantity of barley. This colony has nothing to do with the chace. Government extended its cares ſo far as to prohibit it, that their labours might be wholly devoted to agriculture, and that nothing might divert their attention. The prohibition however, I could perceive, is not very ſcrupulouſly obſerved. Their chief is a *ſtaroſte*, appointed by adminiſtration, and ſelected from the old men of the village, as the name implies. His buſi-

neſs

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563 241 R 177 .24 neſs is to inſpect the progreſs of agriculture; to preſide over their ſeed time and their harveſt, to fix the preciſe period when they are to take place; in ſhort, to ſtimulate the negligence, or encourage the zeal of the labourers, and particularly to maintain the ſpirit of the eſtabliſhment and a good underſtanding among them.

000 Being deſirous of going to Machoure, to ſpend a day with the baron de Steinheil, I left M. Kaſloff at Milkoff, and ſet out twenty four hours before him, that I might occaſion no delay in his journey. To travel with the greater expedition I made uſe of a ſmall ſledge. The roads were no better or leſs obſtructed with ſnow than what we had before experienced, and I was therefore unable to make the ſpeed I intended, notwithſtanding my precaution. The firſt vil-
361 lage I came to was Kirgan. Before I reached it, I paſſed a number of houſes and

balagans

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000 Kreſtoff, towards the village of Klutcheſs-
kaïa, which is thirty werſts from it.

The weather, which, ſince our departure from Apatchin, had been very fine, though cold, changed all of a ſudden in the after-
133 noon. The ſky became clouded, and the wind, which roſe in the weſt, brought us a heavy ſnow. It extremely incommoded us, and prevented me from examining as I could have wiſhed, the volcano of Klutchefskaïa, which I had ſeen at the ſame time with thoſe of Tolbatchina. As far as I could judge, the mountain that carries it in its womb, is conſiderably higher than the other two. It continually throws up flames, which ſeem to aſcend from the midſt of the ſnow, with which the mountain is covered to its very ſummit.

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.24 Upon the approach of night I came to the village of Klutchefskaïa. The inhabi-

tants

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tants are all Siberian peasants, from the neighbourhood of the Lena, and were sent about fifty years ago into this part of the peninsula to cultivate the land. The number of males, including men and children, scarcely exceed fifty. The small-pox attacked only those who had not before been affected with it; but it carried off more than one half of them. These labourers are less happy than those who live in the neighbourhood of Verknei-Kamtschatka. The quantity and quality of their last harvest, both rye and barley, exceeded their hopes. These peasants have many horses belonging to them; in the mean time there are some which are the property of government.

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This ostrog is tolerably large, and appears the more so from being divided into two parts, about four hundred yards from each other. It extends principally from

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eaſt to weſt. To the eaſtward is ſituated the church, which is built of wood, and in the Ruſſian taſte. The majority of houſes are better conſtructed, and are more clean, than any I have yet ſeen. There are alſo ſome conſiderable magazines. The number of balagans is ſmall, and they are very unlike thoſe of the Kamtſchadales; their form is oblong, and their roof, which has the ſame declivity as ours, reſts upon poſts, which ſupport it in the air.

The Kamtſchatka paſſes at the bottom of the oſtrog; it is never entirely frozen in this part. In ſummer it frequently overflows and enters the very houſes, though they are all of them built upon an eminence.

Four werſts eaſt of the church of Klutchefskaïa, is another *zaimka*, or little hamlet, inhabited by Coſſacs or labouring ſoldiers,

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diers, whose harvests belong to government: but I cannot get out of my way to examine it.

I made a very short stay at Klutchefskaïa, my impatience to see Nijenei inducing me to leave it the same evening in order to reach Kamini, a Kamtschadale village, twenty wersts farther. I arrived at midnight, but merely passed through it.

Before day I was at Kamokoff, twenty wersts from Kamini. I soon arrived at Tchokofskoi, or Tchoka, which is twenty-two wersts farther. From thence to Nijenei, the distance is the same, and I travelled it equally in a few hours. I had the pleasure of entering a little before noon into this capital of Kamtschatka, which is seen at a considerable distance, but its appearance is neither striking nor agreeable.

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177 takes cognizance of all mercantile disputes.
692 The magistrate who presides in the latter, is a kind of burgomaster, subject to the orders of the *gorodnitch*, or governor of the town. We have already seen that each of these jurisdictions holds from the tribunal of Okotsk, to the governor of which it is accountable for all its proceedings.

563 But what most interested me at Nijenei, and what I cannot pass over in silence, was my finding there nine Japanese, who had been brought thither in the preceding summer, from the Aleutienne islands, by a Russian vessel employed in the trade of otter skins.

One of the Japanese informed me, that he and his companions had embarked in a ship of their own country, with an intention of visiting the more southern Kurilles islands, for the purpose of trading with the

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563 the inhabitants. They directed their course along the coast, and were at a small distance from it, when they were overtaken by a violent gale, which carried them out to sea, and deprived them of all knowledge where they were. According to his account, which however I did not altogether believe, they beat about in the ocean for near six months without seeing land; of course they must have had a plentiful stock of provisions. At length they discerned the Aleutienne islands, and transported with joy, they determined to make for that coast, without well knowing in what part of the world it was. They accordingly cast anchor near one of the islands, and a small shallop brought them to land. At this place they found certain Russians, who proposed to them to unlade their vessel, and remove it to a place of security; but either from suspicion, or perhaps that they thought the next day would be early enough, the Japa-

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563 nese peremptorily refused. They had soon occasion to repent of their negligence. That very night there arose a strong gale, during which their ship stranded; and as this was not discovered till break of day, they had the utmost difficulty to save a small part of the cargo, and some pieces of the vessel, which had been almost entirely constructed of cedar. The Russians, who had before treated them with civility, now exerted every effort in their power to make these unfortunate people forget their loss. They at length persuaded them to accompany them to Kamtschatka, whither they were bound upon their return. My Japanese added, that they had at first been much more numerous, but that the fatigues of the sea, and afterwards the rigour of the climate, had taken off many of his companions.

My informer appeared to have over his eight countrymen a very distinguished superiority;

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563 riority; and he informed us that he was himſelf a merchant, and the reſt only ſailors under his command. Certain it is, that they entertain for him a ſingular veneration and friendſhip. They are penetrated with grief, and ſhew the greateſt uneaſineſs when he is indiſpoſed, or the leaſt unfavourable accident has befallen him. They regularly ſend twice a day one of their body to wait upon him. His friendſhip for them may be ſaid not to be leſs; not a day paſſes without his viſiting them, and he employs the greateſt care that they ſhould be in want of nothing. His name is Kodaïl: his figure has nothing in it ſingular, and is even agreeable; his eyes do not project like thoſe of the Chineſe; his noſe is long, and he has a beard which he frequently ſhaves. He is about five feet in ſtature, and is tolerably well made. At firſt he wore his hair in the Chineſe faſhion; that is, he had a ſingle lock depending from the middle of his head, the reſt

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563 of his hair round it being close shaved; but he has lately been persuaded to let it grow, and to tie it after the French fashion. He is extremely apprehensive of cold, and the warmest garments given him are scarcely able to save him from it. Under these he constantly wears the dress of his country: this consists in the first place of one or more long chemises of silk, like our dressing gowns; and over these he wears one of woollen, which seems to imply that this sort of materials is more precious in their estimation than silk. Perhaps however the circumstance arises from some motive of convenience, of which I am ignorant. The sleeves of this garment are long and open; and, in spite of the rigour of the climate, he has constantly his arms and his neck uncovered. They put a handkerchief about his neck when he goes abroad, which he takes off as soon as he enters a house, being, as he says, unable to support it.

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563 His ſuperiority over his countrymen was calculated to make him be diſtinguiſhed; but this circumſtance has leſs weight than the vivacity of his temper and the mildneſs of his diſpoſition. He lodges and eats at the houſe of major Orleankoff. The freedom with which he enters the houſe of the governor and other perſons, would among us be thought inſolent, or at leaſt rude. He immediately fixes himſelf as much at his eaſe as poſſible, and takes the firſt chair that offers; he aſks for whatever he wants, or helps himſelf, if it be within his reach. He ſmokes almoſt inceſſantly; his pipe is ſhort, and ornamented with ſilver; he puts into it a very ſmall quantity of tobacco, which he renews every moment. To this habit he is ſo much addicted, that it was with difficulty they could perſuade him to part with his pipe even at meals. He is poſſeſſed of great penetration, and apprehends with admirable readineſs every thing

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563 you are defirous to communicate. He has much curiofity, and is an accurate obferver. I was affured that he kept a minute journal of every thing he faw, and all that happened to him. Indeed the objects and the cuftoms he has an opportunity to obferve, have fo little refemblance to thofe of his country, that every thing furnifhes him with a fubject of remark. Attentive to whatever paffes, or is faid in his prefence, he puts it into writing, for fear of forgetting it. His characters appeared to me confiderably to refemble the Chinefe, but the form of writing is different, thefe writing from right to left, and the Japanefe from the top of the page to the bottom. He fpeaks Ruffian with fufficient eafe to make himfelf underftood; you muft however be ufed to his pronunciation to converfe with him, as he delivers himfelf with a volubility that frequently obliges you to mifs fomething he fays, or apprehend it in a wrong fenfe. His

repartees

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563 repartees are in general ſprightly and natural. He employs no concealment or reſerve, but tells with the utmoſt franknes what he thinks of every one. His company is agreeable, and his temper tolerably even, though with a conſiderable tendency to ſuſpicion. Does he miſs any thing? he inſtantly imagines that it has been ſtolen from him, and diſcovers anxiety and diſquietude. His ſobriety is admirable, and perfectly contraſts with the manners of this country. When he has determined to drink no ſtrong liquor, it is impoſſible to induce him ſo much as to taſte it; when he is inclined, he aſks for it of his own accord, but never drinks to exceſs. I obſerved alſo, that, after the manner of the Chineſe, in eating he made uſe of two little ſticks, which he handled with great dexterity.

I requeſted to ſee ſome of the coin of his country, and he readily gratified my cu-

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 riosity. The gold coin was a thin plate of an oval form, and of about two inches in its longeſt diameter. It is marked with various Japaneſe characters, and it appeared to be of pure gold, without any alloy, ſo that it readily bent in any manner you pleaſed. Their ſilver money is ſquare, ſmaller, thinner, and lighter than that of gold; he however aſſured me that at Japan this was the ſuperior coin. The copper coin is preciſely the ſame as the *cache* of the Chineſe: it is round, and nearly of the ſize of our two *liard* pieces, with a ſquare perforation in the middle.

563 I aſked him ſome queſtions reſpecting the nature of the merchandize they had ſaved from their wreck, and I underſtood, from his anſwer, that it conſiſted chiefly in cups, plates, boxes, and other commodities of that ſort, with a very fine varniſh. I after-

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563 afterwards found they had ſold a part of them at Kamtſchatka.

000 I truſt I ſhall be forgiven this digreſſion upon theſe Japaneſe; I can ſcarcely imagine that it will be thought impertinent; it will aſſiſt us in becoming acquainted with a nation that we have ſcarcely an opportunity to ſee and obſerve.

Having ſpent three days at Nijenei Kamtſchatka, I left it 12 February at one o'clock in the afternoon, to meet M. Kaſloff, whom I was ſure of finding at Yelofki. My road for ſome time was the ſame as I had already travelled in going to Nijenei, and I arrived at Tchoka early in the evening. A ſtrong weſterly wind almoſt always prevails in this place. The ſituation of the oſtrog ſufficiently accounts for it, which is upon a river that runs between two chains of mountains

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 We crossed the river in two dug-out canoes lashed together.
136 These boats are as a rule small, and without attempt at elegance
501 in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatcha River is here about eighty yards in breadth; shallow for the most
226 part, but with a centre channel about seven feet deep. It appeared
251 to be teeming with salmon. Stari-ostrog, situated on the right
262 bank, consists of ten huts and a large number of fish-drying sheds.
361 The long Kamschatkan winters, during which it is difficult to procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

● 563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

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563 and sour bilberries. The houses of the better class of natives are almost all log-built. They are unpainted, and the rooms, unlike those usually seen in the northern parts of Scandinavia, are generally small. Of these there are usually two—rarely or never more than four; and in most of the huts in the larger villages the floors are boarded. As is the case among other northern nations, the houses are in many places raised above the ground, either by means of a foundation of stone, or, like a haystack, by low wooden pillars at the corners. The hut is warmed by a huge brick or stone stove, generally built between the two rooms. It is supplied with fuel only once daily, and the heat thrown out is so great, and the atmosphere, owing to the hermetically-closed windows, so stuffy, as to be well-nigh insupportable to a European. The furniture is simple. A few chairs, an abundance of cockroaches and other less mentionable insects, a rough deal table, and a tawdry gilt *ikon* of the Russian Church—a sort of fetich without which no peasant would feel comfortable—is usually a tolerably full inventory. A house of this kind is, of course, only owned by what may be termed the upper classes—those of Russian blood who have migrated from Siberia. The dwellings of the half-breed Kamschatdales, which I shall presently have occasion to describe, are very different.

000 While we were superintending the passage of our horses across the river—a somewhat lengthy operation, owing to the depth of the stream necessitating the off-loading of the baggage—we were astonished at being greeted in very fair English by a long, lean cornstalk of a lad, who expressed his pleasure at meeting travellers of that nationality in his own country. He was evidently possessed of no little love of travel himself, and told us that he had been for a year as cabin-boy on board an English steamer trading between China and Japan. His advent was opportune, as through him we were able to make arrangements for three more horses, which we were to pick up on the road the following day. For these, which were to accompany us until we reached the head waters of the Kamschatka River, a distance of about three hundred versts, we

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000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

712 R 177 .71 We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

224 438 443 452 563 In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

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224 for the skins varies very much if these be sold separately. But
438 generally the season's catch is disposed of *en masse*, and a fixed
443 price paid per head, whether good, bad, or indifferent. By far the
452 greater part of the trade lies in the hands of the individual I have
563 alluded to under his title of the King of Kamschatka. That he was by no means beloved of his subjects was abundantly evident, but his power was so great that but few were able, even if they dared, to shake off the hold he had upon them. As the owner of what was, practically, the only store in Petropaulovsky, the natives became easily indebted to him, their account for goods supplied being invariably in excess of the amount allowed for the furs brought for disposal. They are thus, we were informed, obliged to bring the catch of the following season to the same market, where, owing to the absence of competition, the prices are by no means high. If the corresponding profit upon the flour, cloth, and other goods sold be taken into consideration, it will be seen that, with a little capital and an elastic conscience, a fur-trader in Kamschatka ought not to do badly.

435 In St. Petersburg the price of a single sable-skin ranges from
563 £2 to £25. In Kamschatka the wretched peasant, living upon half-rotten fish and exposed to the rigours of a climate which, in its severity, surpasses that of almost every inhabited region of the world, receives, nominally, an average of sixteen roubles[1] per skin. In reality, as I have stated, he has to take out this value in
273 goods. He is wise if he does so, and can keep clear of the brandy,
435 which, in spite of the law which forbids its sale anywhere but
R in Petropaulovsky, has proved the ruin of so many of his country-
177 men.

.27 The price of other skins is generally settled individually. A fairly good bear's skin fetches about three or four roubles. It is only the very finest and largest that will bring as much as seven roubles. A river otter, if in good condition, is valued at the latter

[1] The Russian paper rouble is worth nearly half-a-crown; the silver rouble about three shillings and sixpence.

[see page 74--analyst]

Of the number of sables killed annually in Kamchatka it is
224 difficult to form an estimate. The greater portion no doubt are
438 exported *viâ* Petropaulovsky, this port draining the large extent
434 of country in the region of the Kamschatka River, but a good
563 many must find their way to Bolcheresk, and some others to Tigil, a settlement in the northern part of the peninsula which has only a difficult communication with the villages on the lower part of the Kamschatka. In Petropaulovsky almost all the skins pass through the hands of the "King of Kamschatka," and the number exported by him for the season of 1882 was over two thousand. The profit on each skin probably averaged at least forty shillings, and it must be allowed that, however gloomy the outlook in Hudson's Bay and elsewhere may be, there is at least one part of the world where the fur-trade is not "played out."

We left camp again on the morning of August 30th, and after two hours' travelling came to the little village of Puschina, if village indeed it can be called. It now appeared that Vodki's plan had been to get us on to this place if possible, partly because he preferred a hut to tent life in wet weather, and partly, according to
161 Afanasi, because he was afraid of the bears. Puschina consists of
177 three huts only, with the usual proportion of fish-drying sheds,
361 and boasts of a population of fifteen souls. In 1787, according to Lesseps, it was larger than Gunal. The inhabitants appeared dirty and miserable creatures, and were more of the true Kamschatdale type than any others we had yet come across. One or two of the huts or storehouses were raised above the ground on pillars, and much resembled a Norwegian *stabur* in appearance, except that there was a complete absence of carving. It is rare to see any settlement in Kamschatka which is not placed actually on the banks of a river, but Puschina, standing two or three hundred yards away, is one of the exceptions, probably owing to the fact that the banks of the stream are here very low, and the rise of the river during the period of the melting of the snows is often very considerable.

We rested our horses and obtained a draught of fresh milk

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563/622 The head-man of the village received us on landing—a person of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167 563 241 361 R 177 .24 Melcova owes its origin to an experiment. With the view of encouraging the cultivation of the land and of making something more of the country than a mere hunting district, where the inhabitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian peasants were settled here in 1743, who were to devote themselves entirely to agriculture. The result has been to a certain extent successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

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563 glad to be able to get them. The so-called brick-tea is, of course, the only kind in use here, as in other parts of Siberia. It is made in cakes about ten inches by five, and three-quarters of an inch in thickness, squeezed flat by hydraulic pressure, and stamped with large Chinese characters; and were it only of better quality, it would be admirable for rough travel from its portability, and the impossibility of its becoming spoilt by wet. Brick-tea is to a Kamschatkan what coffee is to a Lapp. It is found in the very poorest and most miserable hut, and is regarded as just as much a necessary of life as tobacco. That sugar should also be highly esteemed by the natives is only what might be expected in these latitudes, but its price places it beyond the reach of most. We obtained some at the rate of eighteenpence a pound, but when Dobell visited Kamschatka in 1812 it was sold for as much as five roubles.

Melcova boasts of a resident pope and a church; the latter a log-built edifice, which was moved many years ago from Werchni Kamschatka. It is not ornamental, and is painted red on one side only. The pope received us at the porch, and showed us the interior with evident pleasure; while we, as in duty bound, did our best to assume the necessary air of charmed approval. It must be confessed that it was no easy matter, for the building was completely bare inside, and the walls were covered with English bedroom paper of the commonest kind, set off by an occasional breadth of another pattern, in which pink roses on a bright blue ground displayed themselves in the full atrocity of the early Victorian epoch. Over the altar were a few oil-paintings of saints, one or two of which were passably good.

In the same inclosure as the church, but apart from it, as is the usual custom, stands a little square belfry containing seven bells of peculiarly sweet tone. One is inscribed with the date 1761; the others are more recent. The church itself, we were told, was so old as to be beyond repair, and another one was in course of erection close by, the logs of which were of very large size. The

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563 whole of the labour and material necessary for its construction was being gratuitously given by the inhabitants. I am obliged to record the fact that the building did not appear to be progressing with very great rapidity.

000 The weather of the previous day showed little signs of improvment. A biting wind with rain and sleet at intervals made us not sorry that we had settled to take a Sunday's rest here. Some fifteen miles or so to the eastward is a fine range of mountains about five thousand feet in height, which the downpour of the day before had covered to the lower slopes with fresh snow. Here and there a passing touch of sunlight fell upon the peaks and threw them out in bold relief against the leaden sky. But, late and cold as it was, the fishing had not ceased, and by the river-side they were cleaning and preparing Kisutchi—the latest salmon that visits Kamschatkan waters. Numbers of the King Salmon (*O. orientalis*) hung drying in the balagans; many of very large size.
132 The current of the river is rather swift here and at Werchni, and
133 we learnt that it does not usually freeze completely over until the end of January. It would seem as if the severity of the frost were never very great until that month. The snow invariably falls throughout the country in October, or even earlier, but it is seldom fit for sledge-travelling until November.

281 While at Melcova we tried to get some of the reindeer-skin
291 dresses of the country, as we had already felt the cold considerably in European clothes, and knew that at this season the thermometer would sink steadily from day to day. They had none for sale in the settlement, and we had to send over to Werchni Kamschatka for them. These dresses are of two kinds, the *kuklankas* and *parkas*, and are merely loose sacques composed of pieces of reindeer-skin beautifully dressed, and sewn together with thread made from the sinew of the animal, just as are the "karosses" of South Africa. They are provided with a large bearskin hood, and are put on over the head without fastening of any kind. The rest of the costume is composed of a pair of breeches of like nature, and boots almost

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000 flood at one of their ancient burial-places,—a treasure that I joyfully accepted.[1]

We had taken up our quarters at the house of the head-man, and on my return thither I found that the pope had arrived to pay us a visit. His appearance was not prepossessing, and unkempt hair, a very fully-developed squint, and a total absence of conversation rendered him decidedly uninteresting as a companion. But he brought us two remarkably fine cabbages as a present, for 563 793 R 177 .79 which unaccustomed luxury we felt very grateful. We learnt that there were only nine priests or popes in the whole of Kamschatka. Like the doctors, they are paid by the Government, but they also receive tithes in kind from the people. They come for the most part from Siberia, and socially rank little, if at all, above the peasantry. This gentleman, for example, had married the sister of one of the horse-boys we had brought with us from Petropaulovsky to Sherowmy, who had been sable-hunting with Jacof Ivanovitch at the Kronotsky Lake during the preceding 000 winter. We called on her to thank her for the present, and found her a homely litttle woman with a much larger fund of conversation than her husband. On leaving the house a grey-bearded old man rushed out upon me, seized and kissed my hand, embraced me, patted me on the back, and poured out a torrent of unintelligibility which led me to the extremely English conclusion that he was drunk. I had wronged him. Afanasi was at hand, and gave me a *précis* rendering of his speech. He was merely expressing his delight at meeting with a European traveller!

The doctor had arrived to pay us another farewell visit when I again reached our house. We had many attractions for him; some of them in bottle. Poor old fellow; his sorrow at parting with us was too much for him, and when we turned round and discovered the Hennessey at the lowest ebb, it gave us almost pain to have to sign to Louis to remove it.

[1] *Vide* "Journal Anthrop. Inst.," Vol. xvi., No. 1, p. 21.

22: Guillemard T-2 (1882) 1886 Kamchadal

563 Our original intention had been to leave Kluchi in the forenoon, but many things conspired to prevent it. We had bought some of the little birch-bark barrels that they make so cleverly throughout the country, and there was a great discussion as to whether we had paid for them or not,—easy to be explained by the fact that the inhabitants of the village are the descendants of Siberian Russians brought from the River Lena, and settled here about the year 1735. Wearied with the constant recurrence of these impositions, I wandered out at the back of the village to inspect the fields, which are of larger extent here than in any other place we had yet visited. Rye is cultivated, though apparently not to any very great extent, although the valley of the Kamschatka is said to be the only place where there is any chance of its ripening. It is sown in the middle of May, and the harvest, when there is one, is at the middle or end of August. Potatoes and turnips were grown in some abundance, but there was little else in the way of cultivation except a few poor attempts at garden produce. The catholic tastes of the sledge-dogs prevent the inhabitants from keeping the smaller domestic animals, but cows are numerous, and almost every house had poles placed around the front to keep off these animals, which are permitted to wander about at will.

000 The discussion on the birch-bark barrels had subsided on my return to the house, but we found that our landlord had inserted the pope's cabbages in the bill—or what would have been the bill did such things exist in the country—and more difficulties arose before we finally got afloat. At the last moment the doctor again appeared, with two boxes and a loose razor which he begged us to take to his son in Petropaulovsky. In his hand he bore the Kamschatdale skull, reverently tied up in an old handkerchief. We paid our landlord, and included the pope's cabbages; we paid twice for our birch-bark barrels; we slung up the skull at the back of our hut; and bidding *do swidania* to the united population of Kluchi, who were drawn up on the bank to watch our departure,

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000 the roubles would no doubt start for Petropaulovsky, and turn them into vodky without loss of time.

144 We could make out nothing about the nationality of the people of this village. We had been told that some Aleuts from the Bering group had settled in this neighbourhood, but it seems that the Kurile islanders have also passed northward, and established themselves on the coast near Cape Lopatka. To us it appeared that they did not differ appreciably from the Kamschatdale type, but the opinion of a mere passer-by on these matters is usually valueless. Nothing certain is at present known of the origin of the Kamschatdales and Koriaks—the aboriginal tribes of the peninsula. Both appear to have become greatly reduced in numbers since the Russian conquest. As a pure race the Kamschatdales are now rare, except on the western side of the country. The Koriaks rarely or never come south of the Tigil River. They are a nomad race like the Lapps, owning reindeer and living in movable tents, and, like them, coming down to the lower ground in winter. Both these tribes belong to the "Hyperborean" unclassified group, and Mr. Keane[1] considers the Koriak as probably the parent stock of the sub-arctic races of this part of the globe. Their language as shown by the vocabulary of M. de Lesseps, although bearing but a faint resemblance to the Kamschatdale, is closely allied to that of the Tchuktchi tribe in the region of the Anadyr, and it is possible that, ethnically as well as geographically, they form a connecting link between these two latter peoples.[2]

563 I am not aware that the presence of Lamuts in Kamschatka has ever been recorded by previous writers, but while on our journey through the country we were told by Afanasi Waren

144 [1] "Asia." Stanford's Compendium of Geography and Travel.

167 [2] The accidental immigration of Japanese must be regarded as a not unimportant factor in the composition of the Kamschatdale race. Short as is the period that has elapsed since the Russian conquest, it has furnished several instances, recorded by Krasheninikov, of Japanese junks having been driven from their course and wrecked on the shores of the peninsula. This chance peopling of the country has, no doubt, been going on for centuries, and it is probable that but few of the immigrants ever regained their native land.

22: Guillemard T-2 (1882) 1886 Kamchadal

563 who was well acquainted with both the Koriaks and Kamschatdales, that a small number of this race lived in the mountains in the heart of the peninsula. He described them as a fjell people, great hunters of *Ovis nivicola*, and owning reindeer, which they occasionally brought in for sale to Melcova and other places on the Kamschatka River. That the Lamuts, who are of Tungus race, should have established themselves in such an isolated position is curious, but we had no reason to doubt the accuracy of Afanasi's information. De Lesseps in his "Travels in Kamschatka" gives a vocabulary of the Lamut language, but, as he mentions nothing of this people in the peninsula, it is most probable that it was obtained in passing through their country in the neighbourhood of Okhotsk and the Judoma River, on his return to St. Petersburg.

BOW OF KURILE CANOE.

000 On the 27th we bade a final adieu to Kamschatka. We had more belief in the cold southerly current than in the continuation northwards of the Kurosiwo, of which we had vainly endeavoured to take advantage in our voyage from Japan; and we accordingly set our course for that country so as to keep a few miles only to the eastward of the Kurile chain. Had we known what was before us we should probably have given the land a wider berth. We had no idea that we were destined to come in for two gales and a typhoon before we reached the welcome shelter of Yedo Bay.

We steamed on quietly enough against light to moderate southerly winds until the morning of September 29th, when we experienced a gale from the south-east, which increased in force as the day wore on. At 6 P.M. we altered course, and stood in towards Simusir Island until midnight; a high sea running and the vessel pitching heavily. The wind then slackening somewhat, and veering

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c. than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

27: Sauer--292 T-2 (1789-93) 1802 Kamchadal
116, 133, 137, 361, 563

"At Tolbalshinsk [CMC: mountain] the mountains are broken and barren; they encroach upon the valley, and considerably lessen its width. Storms are frequent between this volcano and that of Klutshefskoi, but never reach the neighbourhood of Milhovoi, and the trees are considerably less in size; but the country continues fertile as far as 30 versts north of the village Klutshefskoi, which is also a colony of Siberian peasants for the same purpose as those at Milkovoi, and who act in the same manner [CMC: see category 563, this source, p. 291]. Their proceedings are in some respects justifiable; for the magistracy at Neizshni exact the same payment from them as from the residentiary merchants. The court of justice conflicts of a burgo-master, four members, or rathmen, a secretary, writers, and watchmen; receiving a salary for the time they are in service: and frequently an expensive deputation is sent to Tigil, Bolshoiretsk, Virchni, and such places as are reported to by these pedlars; so that it is a matter of doubt with me, whether the culture of the earth would render any harvest sufficient to answer the payment of their claims. In some years they amount to 18 or 20 rubles, and in others half as much more."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]; its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636, 71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-1-2
116, 161, 563, 651 Russia
636.65

"The number of inhabitants may be stated as follows, men, women and children:

At the town (Neizshnoi) - -	548
Ostrog Tigil - -	338
Virchnoi - -	226
Bolshoiretsk - -	235
And at the harbour of St. Peter and St. Paul - -	85
Colonists - - -	255
Russians - - -	1687
Kamtshadals - - -	1053
Total - - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the list of those who are tributary, according to the revision [307] made during the government of Mr. Reinikin, who succeeded Major Behm. The revisor (in 1784), by some unaccountable mistake, has frequently noted the name of one and the same person as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonstrances, but in vain: this imposition, however, is the least

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-2
116, 161, 563, 651 Russia
636.65

of their sufferings. They are compelled to pass the greater part of their time in procuring necessaries for their visitors. The governor makes his annual circuit round the peninsula, and receives a present from every individual; the captain of the district goes his rounds twice; different deputations from the courts of justice, soldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horses are quartered at each village, and the inhabitants must provide a stock of hay for them. Thus the Kamtshadal scarcely finds time to collect a supply of food in the fishing season for his own family."

27: Sauer--310 T-2 (1789-93) 1802 Kamchadal
116, 177, 241, 563 Russia
636.24

"About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Petersburg. Major Reinikin succeeded him in the command, and wished to introduce among the natives the culture of the earth, but could not succeed; he brought potatoe seeds with him; first grew them in his own garden; and from thence they were abundantly distributed all over the peninsula, with every species of garden vegetables, which are cultivated with great success by the Russian inhabitants."

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-1-3
116, 563, 635, 651 Russia
636.63

"In the year 1783 a mandate from her Imperial Majesty proclaimed Neizshni Kamtshatka a city; ordained it the seat of government of the country under the chancery of Ochotsk offered privileges to such merchants as chose to become burghers; and instituted courts of justice, establishments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitshik (mayor); and his establishment consists of a secretary and writers; a Kaznatshestva (exchequer) for the receipt of the revenue, and payment of officers; a Zemskoi Sud (court of the interior), of which the Ispravnik, or captain of the district, is president, and in this court one of the natives is a member to represent the whole body; with a magistracy to regulate mercantile concerns, as already mentioned. [311]

The salaries allowed by government to the different officers are as follow:

The Gorodnitshik	- -	600 rubles.
His Secretary	- -	300
The Kaznatshae	- -	400
Ispravnik	- -	400

other officers less in proportion; some of the writers having only 24 rubles per annum.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-2
116, 563, 635, 651 Russia
636.63

Prices of Articles 1793	Kazan.	Kamtshatka.
Linen for shirts per arsheen*	18 cop.*	120 cop.

*A pood is 40 lb. Russ, or 36 lb. English. 100 copeaks make a ruble; a copeak may be reckoned little more than a farthing sterling. 9 arsheens make 7 yards.

Boots per pair	-	-	3 rub.	12 to 18 rub.
Thread stockings do.	-	-	125 cop.	4 to 5 rub.
Soap per lb.	-	-	6 cop.	60 to 100 cop.
Candles do.	-	-	8 cop.	80 to 100 cop.
Tea do.	-	-	2 rub.	12 rub.
Sugar	-	-	50 cop.	3 rub.
Leaf tobacco per lib.	-	-	5 cop.	3 rub.
Rye flour, per pood*	-	-	50	500 cop.
Wheat do.	-	-	60	800 cop.
Rice per lib.	-	-	10	100 cop.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-3
116, 563, 635, 651 Russia
636.63

From this statement of prices, the impossibility of an officer living upon his salary will plainly appear; he is therefore compelled to find out some method of increasing his income, at the expence of the poor natives.

One of the captains of the district, who came here with his wife and family, finding himself extremely distressed, appropriated [312] the tribute of one year to his own use, and wrote a letter to the Empress; stating, that the severity of the climate, the prices of every article of life, and the wants of his family, had compelled him to make use of the tribute, consisting of such a number of sables and fox skins for their backs and bellies, which he rather chose to do than rob the poor natives (the only alternative). He requested her pardon, and an appointment where he could live upon his salary; and the industry of his family (of no benefit in Kamtshatka) might help to repay the amount of the articles that he had appropriated to his own use. The Empress ordered the governor to give him such an appointment, and pardoned him on account of the good reasons that he assigned; but this pardon was not to be regarded as a precedent; for such mercy was not to be extended to any future person who should dare to act in the same manner.

The magistracy receives its income from the burghers and meshanin. The latter are privileged pedlers (and the colonists are of the number); the former are divided into three classes, according to the extent of the capital that they give in, upon which they pay one per cent."

28: Sarytschew--65-66 T-1 (1789-90) 1806 Kamchadal
116, 361, 563

"The fortress of Bolcherezsk, situated on the banks of the Bolschaja, has a church and thirty habitations. Its inhabitants consist principally of Kosaks, with a few merchants and citizens. Before the advancement of the fortress Nishne-Kamtschatzsk to the rank of a town, the first magistrate of Kamtschatka made this his place of residence; but now a serjeant is commander of the fortress. The Kosaks here are much more opulent than those of Petropaulowsk, almost all of them having their cattle and a good domestic economy. Their gardens are stocked with excellent turnips and potatoes. For the introduction of the latter vegetable they are indebted to counsellor Reineke, the former commander of Kamtschatka.

All the inhabitants here are usually dressed like the Kamt-[66]schadales, in narkas and kamlegas. The former are the skins of reindeer, cut into shirts; and the latter are skins of any kind, stripped of their hair, and made quite pliant. On holidays, the women wear a sort of silk gown of an old Russian shape, which was fashionable 60 years ago. They have also a speckled silk handkerchief about their heads.

In the first days of the new year, the inhabitants assembled every evening for the purpose of dancing. The women understood Russian dances very well, and what was still more surprising, could dance in the Polish fashion, and very passably even à la Grecque. The music consisted of three fiddles, played by Kosaks."

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 ter which, on a beautiful frosty moon-light morning, I resumed the journey over a picturesque and mountainous country, well wooded and watered. Late at night we reached a small place called Apachinsk, forty-five miles. Ere we arrived we had to cross the river called Bolshaya in a canoe, the river not being frozen, a circumstance at this time of the year very
361 rarely known. Thirty-miles farther we reached the
161 ancient capital of Kamtchatka, Bolcheretzk, now a small village containing fourteen dwellings, one hundred and sixteen inhabitants, and about thirty
000 balagans, i. e. sheds for drying fish. The path to it was over a flat level along the river. I was myself the driver towards the abode of my now father-in-law, whose homely manners, numerous, healthy, smiling children, and hearty breakfast, made ample amends for the fatigues of the last two days.

Bolcheretzk stands on the river of its own name, about fifteen miles from the sea of Okotsk, and has little to boast of at present but the affectionate remembrance the inhabitants bear to the memory of Major Behm, so highly spoken of by Captain King. I heard, also, strange stories of the celebrated Benjofsky, who made his escape hence to Canton, having previously murdered some people, and fomented an insurrection. I heard nothing in his favour, although an old lady, afterwards my aunt,
563 was a companion of his. I found Bolcheretzk to be inhabited by a civil people, all Russians: but
000 were it otherwise it might be expected I should

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 those I had, and then proceeded upon my journey, reaching by midnight Kickchick, twenty miles, a place of equal wretchedness with the last, and like it containing but fourteen or fifteen inhabitants, most of whom are disabled from work by disease. With the same dogs I reached Kolofsky ostrog thirty miles along the sea coast, upon which a tremendous surf was roaring with a strong north-west wind. There are in the neighbourhood several fine lakes which never freeze, and produce trout and salmon peal of a fine flavour during the whole of the winter. Deer, mountain sheep, and game of every description that is found in the Peninsula abound in the mountains and forests, and fine meadow lands every where skirt the coast.

133 I remained to take tea with the old Toion, whom
563 I found to be a fiddler and a scholar, and depart-
361 ed for Vorofskoy ostrog, forty miles. The mountains now approached nearer to the sea-coast, and present some beautiful scenery. I put up at the abode of a wealthy Russian farmer, and felt highly gratified
161 in observing a small but fat herd of cattle. This is
361 considered a rich spot, yet it contains only nine
133 dwellings with about forty inhabitants, not enough to keep up the chase. The place is prettily situated on the Vorofskaya river, about four miles from the sea. There is a snug harbour at the mouth of the river, where the transports from Okotsk formerly visited, and the river is navigable to the village which retains the vestiges of a small fortress. The meadow lands about it are at once

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 Tygil stands on the river of its own name, at
161 thirty miles from the sea. The country round it has
361 somewhat of the picturesque during the summer, but its situation in winter is exposed and dreary. A range of mountains from the NE to the SE defend it in some degree from the coldest winds, yet it is on the whole but a poor place. There are at present twenty-seven dwellings and two hundred and
361 fifty inhabitants, and it is denominated a fortress;
181 formerly it may actually have been one, but at
R present will be best appreciated as to its strength
177 by a reference to George's Travels in Siberia, who,
. 71 speaking of fortresses or ostrogs, the latter word comprehending Siberian fortresses, says, "It would be dangerous to attempt storming them, for whoever wanted to mount the greatest and only bulwark, a wooden paling, would most probably come to the ground with the whole structure about him." Such I am certain is the present state of Tygil, and which, with its half dozen Cossacks, can only be held *in terrorem* over the neighbouring Koriaks: the Kamtchatdales are not a people numerically or physically strong enough to create a disturbance.

361 The inhabitants of Tygil are all Russians, they
563 have of late got a church and the walls of an hospital erected; when they are to be covered in I know not, though shortly I hope, for they are much wanted. The ravages of a certain disease at this place are indeed dreadful, and I should think ought to call forth the attention of the govern-

361 ment so far as to induce them to export doctors to,
563 and import priests from Kamtchatka. I mean no disrespect to those reverend gentlemen, but just to hint, as my opinion, that instead of the soul only, it would be better to take care of the soul and body at the same time. The average number of people annually admitted to the hospital books is three hundred and fifty, nearly twice its whole population, who are chiefly employed in fishing and trading with the neighbouring Koriaks or Kamtchatdales. The place also serves to keep up the winter communication with Okotsk. For the Koriaks will not furnish rein-deer or dogs to carry the post, unless they are remunerated by a present of tobacco, spirits, &c.

000 From what I have seen of the Koriaks, both in Tygil and in their encampments to the southward, I have no doubt of their being of the same tribe as the Tchuktchi; they have the same features, manners, and customs, and the same language—the same love of independence, and are, in truth, less scrupulous of giving offence to the Russians than their northern neighbours, for they frequently break out in hostility with the inhabitants of Tygil, unless a supply of spirits and tobacco is sent to them, for which, however, they barter reindeer and furs.

132 The climate of Tygil is cold; already had the
563 thermometer passed 28° of Reaumur. The Cossacks however, contrive to raise a few vegetables, as po-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 tatoes, cabbages, turnips and radishes; but the two
137 former never arrive at complete maturity, the one being waxy, and the other without a head. The famous antiscorbutic cheremsha, or wild garlick, abounds, as does a small but delicious root, somewhat resembling a sweet potatoe, called, in the language of the country, kimtchiga. There is also an abundance of wild berries in the neighbourhood of Tygil, yet their chief support is fish and rein-deer, of both which I partook at the hospitable table of
000 the commander of the fortress. At the expiration of four days I departed, having remained so long to recover my feet, which had been severely frost-bitten from wet.

I was accompanied by the commander of the transport lying in the Haven: he was what is termed a good, though a droll, fellow; and I was
133 gratified with his society. Our route lay at first
361 up the Tygil, which from its source to near the town runs through an interesting country. At midnight we reached Sedanka, a small village, containing six dwellings. From thence to Bolcheretzk is called the Tygil coast, which, generally speaking, is low and flat, the sea-coast being from thirty to forty miles from the mountains. The villages through which I had come were all of them upon the banks of some small streams, which, in most cases, rise in the mountains; but sometimes they emanate from the lakes, which are numerous. The rivers I do not apprehend to be

29:Cochrane T-2 (1821-22)1824 Kamchadal

133 more than the melting of snow and rain which de-
231 scend from the eternally snow-clad peaks. The quantity of horned cattle upon the coast is so small as not to merit notice, although the pastures are extensive and fertile enough to feed millions.

563 At Sedanka we procured dogs to enable us to cross the mountains to the next station, a distance of one hundred miles. Early in the morning we passed the camp of the Koriaks, and continued our route along the Sedanka river for forty miles, when we reached the Rasoshna. We encamped for the night in the snow, the dogs round us, and then the fire; we passed on the whole, a pleasant night, although my feet were still in a bad state, owing probably to their late want of pedestrian exercise.

133 The following day we crossed numerous elevated
137 lakes, and then over mountains and a well wooded country. On our way we fell in with a caravan of eleven nartes from the town of Cliutchi bound to
133 Tygil. We continued until we reached an elevated
132 desert of ten miles long, which we crossed in a continual storm of wind and snow, called in this country *purga;* we halted in a miserable place, having come about thirty miles. I can hardly imagine how the poor dogs found their way, or how they managed to drag us along. There are times when these *purgas* are so tremendous that mountains of snow are levelled, immense valleys filled, whirlpools formed of snow, not only stopping the further progress of the traveller, but absolutely burying him

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 pelled to return. We soon regained the ostrog we had left, and there we passed the night, witnessing such a scene of riot and drunkenness as is quite beyond my pen to describe. My companion had parted with a few bottles of spirits unadulterated, which, when they had operated, induced him again to launch out adulterated spirits, receiving, of course, a sable for each bottle. I was thoroughly convinced from this circumstance that Kamtchatka should not be supplied with spirits.

361 I was mortified at not visiting the town of
161 Nishney Kamtchatsk, and its port, but may say
137 that the former contains twenty-two dwellings, and one hundred and fifty inhabitants, and the latter an accessible port, but much feared for want of being frequented. Formerly, when the seat of government was held there, vessels annually went to St. Peter and St. Paul's for provisions, but this is now no longer the case. Timber abounds in such quantities and of such a quality as should induce the government to fell and to export it to the present capital, where it is much wanted. I reached Cliuchie at midnight, having come over a few lakes
133 and a half frozen river. Cliuchie is a Russian pea-
361 sants' village, containing one hundred and eighty
563 inhabitants. It is pleasantly situated upon the right bank of the Kamtchatka, at the foot of the eastern termination of the lofty peak which is not far from it. This peak is said to be the most elevated in the peninsula, being about fifteen thousand

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
.65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.
563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

29:Cochrane T-2 (1821-22)1824 Kamchadal

563 it is not so, considering how well its central situ-
361 ation is adapted for that purpose. A neat church has lately been erected at the expense of the inhabitants, who are in general disliked by the chiefs and officers, owing to their resisting the payment of individual yasack, or presents. This is surely an enhancement of their character.

563 I quitted the village of Cliuchie perfectly satisfied with the character and conduct of its inhabitants. They preserve a great tenaciousness of their rights, and detestation of the injustice shown to their neighbours, the aborigines. To prove this assertion, I need but mention that with these Cliuchie peasants, I was obliged to pay in money for the hire of the dogs which drew me; a circumstance which had happened to me no where else, and therefore carries the most undoubted proof of exactions, extortions, and cruelty exercised upon the most innocent and inoffensive peo-
132 ple in the world. My route lay from Cliuchie at first over some small lakes, and then along the banks of the Kamtchatka, which at this period of the year, 14th December, O. S. is but half frozen.
361 At twenty-five miles I reached the ostrog called
161 Krestova, having three yourtes and twenty-four in-
164 habitants, nearly all of whom are confined by disease. I continued on with the same dogs to Oushkielova, thirty miles farther, having four habitations and twenty individuals, most of whom also are debilitated: indeed it is extraordinary what

137 enough to bear the nartes. I crossed two other small rivers by bridges for that reason. The scenery was very beautiful, a lofty range of mountains lay to the east with a good deal of fine timber, while the flat country is one fine uninterrupted meadow,
361 without a single cow to feed upon it. Stchappinat
161 has seven dwellings and fifty-two inhabitants, and,
136 it is said, the finest fish in the peninsula, though but
226 few are actually procured from it: they are considered so delicious that the inhabitants send them to the seat of government as presents to the chief and officers. The causes of their comparative scarcity are probably the depth and rapidity of the river, as well as the smallness of the nets; for unless the river be actually swarming with fish, it is seldom that the inhabitants can provide themselves with a sufficient supply.

137 To Massura are forty miles of a well wooded
361 country, and fine meadows upon the banks of the
161 river. I almost flew the distance, being scarcely
234 six hours in performing it. There are ten dwellings and sixty people, civil and hospitable to a proverb; a considerable quantity of cattle are in the neighbourhood, feeding on a rich pasture which runs to Kirgannick twenty-five miles further, where I got sight of the magnificent mountain scenery over hanging Verchney Kamtchatsk. One Sopka
361 (Peak) is especially remarkable. Milkova, a
563 Russian peasant village, ten miles distant contains fifteen houses and one hundred and twenty inhabit-

361 ants received me next, a neat place abounding in
563 cattle, if thirty or forty of them may constitute an abundance; there are however no animals of the chase. A handsome church has of late been erected under the auspices of Captain Golenistcheff, the second in command of the peninsula, whom I found expecting my arrival. I continued for Verchney Kamtchatsk, also a peasants' village, but was obliged to return owing to the inefficiency of the
361 dogs, although distant only eight miles; I at length
563 reached it much fatigued, having come through
R a pretty place called Schegatchik, where some Cos-
177 sacks are stationed to take care of a few heads of
.23 horned cattle, and four or five horses, which belong to the government. The situation is beautiful, on a branch of the Kamtchatka, which makes a semicircular indentation into the land, just opposite to Verchney Kamtchatsk, forming an island opposite to the junction of the Gatchick and Milkova.

000 I procured fresh dogs at Verchney, a place on the decline, and proceeded towards Sherom twenty miles, situated in one of the most romantic and enchanting valleys in the peninsula. I there met with the Ispravnick and eighteen nartes engaged for the collection of the yasacks, public and private, as well as for trade. I felt gratified to meet them, as I received good news of my affairs at the seat of government; and learnt also that there was a road before me to cross the desert, lying towards Malka. The Ispravnick had been detained four-

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177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

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162 ing degree is a question I shall not answer, farther than by reminding my readers that at the discovery of Kamtchatka, we are told in the Russian history, that no less than one hundred and sixteen villages
164 were on the banks of the river Kamtchatka. The
162 small-pox, and its rival distemper, with other diseases, and above all the spirit of persecution which has been unremittingly practised towards these poor people, have been the several causes of the depopulation. Of late, however, I can with certainty say the population has not decreased; this may be owing to the benefits arising from vaccination, as well as somewhat better medical attend-
162 ants. But although population has of late kept its
563 maximum, it may be a question whether the aborigines have not decreased in the same ratio that the Russians and convicts have increased. At present there are several Yakut as well as Russian exiles, in the peninsula, neither of whom can be of much benefit; but both assisting to persecute and plunder the Kamtchatdales.

175 Of the history and origin of the Kamtchatdales little positive has ever been known; and that only for the last one hundred and thirty years. Kamtchatka is supposed to have been visited by some Russians in 1649, when one of the traveller Deshneff's vessels, was wrecked on its coast. Those Russians lived with them in peace for a considerable period of time; but quarrelling among themselves were murdered. Nothing more is known of the place

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171 with a dialect of the same language, originating
181 from the Mongolian, and the only difference be-
177 tween them and the Kamtchatdales is, that they are a more manly, and consequently a more independent race; for of all the people at present
157 existing, I believe the natives of this peninsula to
181 be the most affable and hospitable; but, at the same time, the most cowardly and insensible. I never saw in any part of the world a people more abused, under the sanction of a proverb, now become almost a principle, "God is high, and the Emperor far off."

000 Their modes of fishing and hunting, and such productions of the country as I have not noticed may be found in Cook's and other travels. I will therefore proceed to compare the present happiness of the people of this Peninsula, with that which
231 they formerly enjoyed. In the first place, as to
563 their possessions in horses or horned cattle.—It
R appears by the last census, that there are but one
177 hundred and nine of the former, and nine hundred
.23 and sixty-eight of the latter in the whole Peninsula, two-thirds of which are in the hands of the Russians; and but three hundred and ninety-three head of cattle in the possession of three thousand four hundred Kamtchatdales and Koriaks. It is to be regretted that the flattering prospects held out by Captain King, have not been realized. The introduction of horses and horned cattle would much tend to ameliorate the condition of the peo-

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273 Another great cause of this ravage in population
435 has arisen from the introduction of spirits: a Kamt-
563 chatdale will sell his last sable or fox for a glass
733 of it, though he is not physically strong enough to drink any thing of the kind. When it is considered that sixteen thousand bottles of this trash are consumed in the short period of three or four months by six or seven hundred people, we may well feel pity and surprise—pity for the poor women and children, and surprise at the means of getting either the money or sables. Such a quantity of spirit ought to sell for fifty thousand roubles, which is one hundred per cent. upon the price at Okotsk, but it is in reality sold for twice that sum. When it is recollected that officers, soldiers, sailors, merchants, and priests travel round the Peninsula for the purposes of trade, it will be less wonderful when I assert that each bottle of spirits sold to the Kamtchatdales, produces the value of ten and twelve shillings. Now allowing half the quantity imported (eight thousand bottles) to be consumed by the aborigines, this would produce from eighty to one hundred thousand roubles, while the cost is, in Okotsk, only twenty-five thousand. I have seen a bottle of spirits sold for a sable, and afterwards, when the party was drunk, a bottle of adulterated liquor has fetched the same price: in short, I have seen three and even four sables given for two bottles of spirits.

Allowing seven hundred and fifty families of the

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273 generation that the stock itself can be preserved,
435 which will not long be possible, if spirit continue
563 to be transported and retailed out as it now is.—
R While making these reflections in England, I am
177 aware that the Russian Government have desisted
.27 from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

651 The abuses arising from the collection of the
661 yasack are most cruel. The yasack itself is incon-
R siderable, but from the arbitrary manner in which
177 it is collected, it is rendered odious and oppressive.
.65 The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

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poor family has been ruined through the cruel and oppressive conduct of these tax-gatherers, not from a deficiency of the *legal* dues, but of illegal dues. The mode of taxation in each ostrog is also highly objectionable, and sometimes rendered cruel. They are not taxed as a people but as a place, and it not unfrequently happens that the village which formerly contained forty or fifty able people, and was taxed as such, does not the following year contain more than twenty or twenty-five, in consequence of illness or removals. There is, however, no remedy, the yasack of the whole must be paid by the few. It is also not a little singular that each ostrog is taxed in money, and yet money cannot be received; the duplicity of this act is too apparent to be mentioned, yet it would be seen that the government must be unacquainted with a fact of the kind, for the difference in the amount of the tribute would not equal one hundred pounds. Instead of the sum of money at which each village is rated, the inhabitants are obliged to pay furs at one fourth the value. Sables of the finest quality, and worth forty shillings a pair, are never averaged at more than ten. It would be more honest to increase the nominal tribute of money, or put a specific tax on furs, which would be felt less severely, because an appearance of candour would accompany it.

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The next galling tax is that levied for the tax-gatherer himself, and this is a greater grievance than that levied on behalf of the Emperor, and under more humiliating circumstances. Each os-

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trog, and each Toion or Chief of it, is also compelled to pay the same tribute to his actual Chief as to the Emperor himself; so that the yasack is *de facto* paid at least five times over.

Nor is the impolitic system of collecting the tribute more injurious than that arising from forced or gratuitous services, such as the forwarding of the post, the transport of flour and salt, and the issuing of padvodies, or forced levies of horses or dogs, to officers and favourites. This is indeed an intolerable abuse, and calls loudly for redress. There can be no doubt but that if the proprietors of dogs were rewarded at a proper time and in a proper manner, they would as much court the employment as they now abhor it. According to the present plan the natives lose their time, their dogs, their health, and their provisions. Any favourite or officer who may wish to trade is furnished with one of these free billets, which authorizes him, upon the plea of public duty, to call out men and dogs. While the manner of the officer or favourite seems to intimate, that he confers an obligation upon the Chief of the village by his acceptance of a couple of sables as a present. Nor is this all: not content with the present, the party travelling has the privilege of trading, and buying just as many more sables as the poor aboriginal may have caught, and which are invariably sold for just such a consideration as the officer may incline to give.

If a governor or officer be compelled to travel upon public service, and receive from the Crown a

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sum of money to pay travelling expenses, it seems very strange that such money is not paid to these poor people. As little can I understand why a post should travel gratis: surely the poorest and most distant part of the Russian empire, should not be oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

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With respect to the pedlers, here denominated merchants, they in truth ought to be taxed severely, as well in regard to the goods they bring as the price at which they are sold, the articles being such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future necessities. The quantity of articles hawked about by the merchants consists of tobacco, spirits, silks, tea, sugar, nankeen, and cotton handkerchiefs. Every Kamtchatdale keeps open house, and upon the arrival of a Russian his door is held open, the

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661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to he held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

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563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

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000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single man pays a heavy tax, a married man a heavier, and a father the heaviest of all. Such conduct is bad policy on the part of government, and carries with it more the appearance of a wish to extinguish than to increase the population of Siberia.

437 I have already commented upon the evil effects
563 arising from forced levies, and forced services; of
661 the transport of flour, salt, spirits, the post, as well
R as officers from one place to another without any
177 remuneration to the inhabitants. Of the conduct of
.66 these travelling gentlemen, high and low, it will be sufficient to give a specimen. The officer, upon arriving at a village, is received by the Toion or

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437 Chief, and conducted to the warmest and cleanest
563 part of the yourte. His upper garments are taken
374 from him, cleared of the snow and put out in the
661 open air for the night; it being understood that
R the colder the dress is put on in a cold country,
177 the warmer it ultimately becomes. The landlady, or
.66 Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

000 I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

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231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert
563 to one or two points not hitherto dwelt on. The
793 children of the natives receive no education, and
871 the children of the Russians but little more. There
R certainly is a school existing in St. Peter and St.
177 Paul's, governed by a priest, and regular school-
.87 master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see
563 how the boys could be kept alive. Of the clerical
793 gentlemen themselves, I may observe, that they
R maintain a great distinction between practice and
177 precept. They are very numerous: I know not what
.79 so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

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563 sides trade. Of late the Emperor has given the cler-
793 gy an allowance of flour as well as a regular salary,
R and it may therefore be hoped that the natives will,
177 at least, be so far benefited as to have fewer of their
. 79 visits, except on their spiritual concerns.

Whether the Russian government will pay any
000 attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing re-
133 markable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also
132 emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

[in the winter of 1821-22--Analyst]

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000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

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destitute of society; the Creoles of their being kept in a state of poverty; while the Kamtchatdales bitterly lament the association with either the one or the other. It has been observed that St. Peter and St. Paul's can never be a good town, owing to its want of wood. It may be asked, why then was the seat of government removed from a more eligible place, Nishney Kamtchatsk, or why was it not removed to the centre of agriculture and population, so far as either can be said to exist? It has been already changed three times, and is, I be-

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lieve, destined to another removal. Kamtchatka neither can nor will thrive so long as its chiefs are sent for five years only: such a short period scarcely allows them the time of doing good, however well disposed they may be. The general mode of occupying the allotted term may be thus described. The first year is employed in looking about and forming places for the improvement of the country, the amelioration of the condition of the aborigines, &c.: the second year is passed in making reports, stating opinions, &c.: the third year brings the reply of the government, directing or authorizing the mode of administration: the fourth is employed in preparing or at most in acting upon such orders: while the fifth and last year is generally employed in preparing to return to Europe, and levying a parting contribution:—and thus the whole five years are, more or less, taken up in trading and accumulating as much

2: Schrenck--268 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Ainu ABG
Kamchadal RY3

K 175 131 167 A 175 /127 cont./ The next and last of the Kurile Islands, Schumschu /Shumshu/, on the other hand, received its population, not from the south anymore, but from the north, from the adjacent Kamchatka Peninsula. It was not Ainu, but Italmen or Kamchadal, who originally visited this island only to trap animals, but after the arrival of the Russians in Kamchatka, they began to take up permanent residence out of fear of having to pay tribute to the latter and because of quarrels among themselves (2). The names of the islands mentioned also suggest

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2. Steller, op. cit., pp. 7, 30; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, pp. 2, 4.

this spread of the Ainu and Italmen over the Kuriles, for in the Ainu language "Poro mosiri" or "Poro-moschiri" means "large island" (3), and "samatsch" is said to mean "island" in the

3. Not simply "island," as Steller (op. cit., p. 7) interprets the name "Buru muschi" and the "Paramusir" made from it, so he thinks, by the Russians.

K A 175 563 484 K [101] Italmen language (4). Moreover, the Italmen on the island of

4. Steller, op. cit., p. 6. This is the reason why the inhabitants of the southern tip of Kamchatka call the inhabitants of the islands "Sumtschuai," i.e., islanders (Steller, op. cit., p. 7.

Schumschu and on the southern tip did not maintain relations with the Ainu from the more distant islands without mixing with them: for many years they have entered into marriages

2: Schrenck--269 E-5 (1854-1856) 1881-1895 RX2 Gilyak
Kamchadal RY3
Ainu ABC

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with them, and since they moved back and forth between the mainland and the nearest island, and, on the other hand, the Ainu, too -- who, as Steller says, roam about on the sea as the Tartars do on land -- repeatedly came to Kamchatka, a mixed people made up of Italmen and Ainu was formed on the entire southern part of the peninsula and showed many differences in outward appearance and in language from the Kamchadal living farther north (5). It is therefore not surprising that in the be-

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5. Steller, op. cit., pp. 7, 23; Krasheninnikov", op. cit., Vol. I, p. 143; Vol. II, p. 4.

ginning the Russians took the inhabitants of southern Kamchatka for the same people as those inhabiting the islands, the Ainu, and designated them, like the latter, with the name "Kuriles" (6).

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6. Hence the contradiction between the earlier assertions by Müller in his article, "Geographie und Verfassung von Kamtschatka aus verschiedenen schriftl. und mündl. Nachrichten gesammlet zu Jakuzk, 1737 /Geography and Organization of Kamchatka from Various Written and Oral Reports Collected in Yakutsk/" (in the appendix to Steller's Beschreibung von Kamschatka /Description of Kamchatka/ and those by Steller and Krascheninnikof. Müller (op. cit., p. 18) has the Kuriles living on Kamchatka along the east coast as far as Awatscha and on the west coast as far as the Kompakowa River; he speaks of Bolscherezki Kuriles (p. 21); he regards the inhabitants of Schumschu, who, moreover, he has coming from the north, as Kuriles just like those on Poromuschir (p. 45), etc. To be sure, for the Kurile

Ko 141 On the whole the coastal Koryak type holds an intermediate position between the Kamchatka and the Eskimo types.

144 [6] The Itelmen, who have preserved their language, are anthropologically still mixed up with the Russians. This is
Ka 144 corroborated both by the data of the interviews and by the similarity of all their traits to the white-haired Europeoid race. These traits include pigmentation, stiffness of the hair, the structure of the cheekbones, the profile of the upper lip, etc. It follows therefore that the deviation of the Itelmen from the "Mongoloid standard" in the form of their nose, in the structure of their eyelids, and in the development of their beard, as well as the similarity of these Itelmen traits to those of the Eskimo must be regarded not as proof of a direct relationship of the two groups but as a result of the mixture of the Russians with the Itelmen. The ancient Itelmen type was indubitably characterized by a greater frequency of the epicanthus than among the Eskimo and by a less sharply defined nose. On the whole, they were probably related to the coastal Koryak, and thus they also held an intermediate position between the characteristic representatives of the Eskimo and the Kamchatka types.

The Russianized Itelmen (in the future I shall call them by their conventional term "Kamchadal") are not easily distinguished from the descendants of the ancient Russian inhabit-
Ka 659 ants of Kamchatka. In the official documents only the 1897 census made a clear-cut demarcation between the two groups,
101 [the Kamchadal, and the Russianized descendants of the Itel-
● 565 men--Analyst] and such a demarcation was facilitated at the time it was done by the difference in social rank (sosloviye) of the members of the two groups. Yet even then this was an isolated and purely formal difference. The 1926 census reflects in this respect an unbridled arbitrariness of the census takers. The inhabitants of the ancient Upper Kamchatka and Lower Kamchatka forts are referred to in the census as Kamchadal, while the Russianized descendants of the Itelmen from the villages of Kikhchik, Kolpakovo, Krutogorovo, Oblukovina, etc. are referred to as Russians.

Ka 101 The contemporary official records are fully justified in not giving recognition to the term "Kamchadal" and in regarding all the Russian-speaking people of Kamchatka as Russians. However, this term has not become obsolete in everyday conversation, and is employed by the natives as well as by the new immigrants not only with reference to the Russianized Itelmen but also to the descendants of the ancient Russian

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

563 to consist in this, that the Cossacks live in houses, and the natives in huts under ground; the Cossacks usually eat their fish boiled, and the natives mostly dry; besides, the Cossacks dress their's several ways different from the natives. As it is impossible for people to live there without the help of women, who are so necessary in many parts of their work, such as cleaning their fish, drying their roots, spinning and making their shirts and cloaths, and as the Cossacks first settled in *Kamtschatka* without their wives, whom upon account of the difficulty of the journey they could not transport thither, I shall now relate what methods they used to make up for this deficiency.

144 563 177 567 One may easily imagine, that the Cossacks did not reduce these people without using force; and in these wars they took prisoners many women and children as well as men, and obliged them to perform all the labour. The care of overlooking these servants was entrusted to such as they made their concubines, whom they frequently married if they had any children by them; and sometimes the natives offered them their daughters, whom they promised to marry as soon as the priest arrived: so that it sometimes happened that the Cossacks had a marriage and christening at the same time; for then there was but one priest in all *Kamtschatka*, who lived in the lower fort, and once in a year, or once in two years, visited the other settlements.

563 567 The Cossacks, a people rude enough themselves, seemed to be pretty well pleased with the manner of living here, using the natives as their slaves, who furnished them with sables and other furrs in abundance, and passing the greatest part of their time in playing at cards: their only want seemed to be that of brandy. Before there were any brandy shops they used to meet in the office where the tax was received: here the gamesters brought their furrs, and, when they had no furrs, even their slaves; and

and ſometimes they played 'till both parties had pawned their 563
cloaths for brandy. Such way of living, one may eaſily believe, 567
was attended with great confuſion; but what the poor ſlaves ſuffered is almoſt incredible, being obliged ſometimes to change their maſters twenty times a day.

The invention of making ſpirits happened accidentally. The 563
Coſſacks, after the manner of the natives, made a great proviſion of all kinds of berries for the winter. It happened ſometimes that they began to ferment in the ſpring, and could be uſed no other way than in drink. This drink was obſerved to cauſe drunkenneſs when taken in great quantities; upon which they began to diſtil it, and, to their great ſurpriſe and pleaſure, found that it produced a good ſpirit. They have ſince diſcovered that they could make brandy from an infuſion of the ſweet graſs, and now they have ſpirits in plenty. Their method of preparing this herb for diſtillery we have already explained.

Thoſe that are curious to know whence the Coſſacks ſettled 563
here obtained their riches, muſt be informed that they owe them 661
to the following circumſtances: firſt, when they conquered the 651
natives they made all the plunder they could: ſecondly, every 439
party of Coſſacks, that was employed in gathering the taxes, R.
obliged each tributary native, beſides the crown tax, to give them 177
four fox-ſkins and one ſable, which they divided among them- 165
ſelves: thirdly, by their commerce with the natives, whom they obliged to pay a very high price for every trifle they furniſhed them with. Although, at preſent, the Coſſacks are forbidden to take any thing more than the crown tax, yet they are ſtill allowed to ſet what price they pleaſe upon their goods; and indeed they ſell them, or change them for furrs, at very great profits, and ſometimes for proviſions, nets, and boats. Without 563
this they would not be able to live upon their ſmall pay, which is no more than what they uſed to receive at *Jakutſki*, and, both in money and proviſions, does not amount to above 14 rubles

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 825 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

136 so be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn
262 about the thickness of sugar ropes; and the fishing begins about
576 the middle of *May*, and lasts six weeks. The *Kamtschadales*
574 esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about
136 the middle of *June*. The *eukol* that is made of it, though very
226 pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the shoals appear at the mouths. The second is, that this fish is more plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into these rivers that communicate with the lakes. Here the inhabitants catch them by nets, dams, or other methods.

1. [chivatsi]

The

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

people, it has been perverted by foolish and ridiculous ceremonies; and this appears the more probable, because that, after their summer or harvest labour is over, they look upon it as a sin to do any work, or make any visits, before this holiday, which if any one neglects he is obliged to expiate it at that time, if not before. From hence we may see that the ancestors of this people were accustomed to offer up the first fruits of their summer labours to God, and to make merry with one another. The northern and southern *Kamtschadales* have different ceremonies in the celebration of their holidays, which are extremely silly, and consist of many ridiculous anticks. I shall give a slight sketch of one of these assemblies in the southern *Kamtschatka*. 796

After many strange ceremonies they introduce a little bird and a fish, which they roast upon the coals, and divide amongst them, when every one throws his share into the fire as a sacrifice, or an offering, to those spirits which come to their feasts; then they boil dried fish, the broth of which they pour out before their image, and eat the fish themselves; and then take the birch-tree out of the hut, and carrying it to their magazines, lay it up there to be kept for the whole year. Thus ends the festival.

CHAP. XIV.

Of their FEASTS *and* DIVERSIONS. 527 574

THEY make feasts when one village entertains another, either upon the account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of opanga, 'till they are all set a vomiting; 273

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY

576

261 WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
574 ſight of victuals, and are ſcarce able to move, from repletion.

576 When the ſtranger is gorged, and can no longer endure the
431 heat, he purchaſes his diſmiſſion with preſents of dogs, cloaths,

or

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

or whatever is agreeable to his landlord; in return for which he receives old rags, and uſeleſs lame curs. This, however, is reckoned no injury, but a proof of friendſhip; and he expects, in turn, to uſe his friend in the ſame manner. And if that man, who has thus plundered his friend, returns not his viſit in proper time, he does not thereby ſave his preſents, for the gueſt pays him a ſecond viſit, at which time he is obliged to make him what preſents he is able; but if, either out of poverty or avarice, he makes him none, it is looked upon as the greateſt affront, and he muſt expect this man always to be his enemy: beſides, it is ſo diſhonourable that no body elſe will ever live in friendſhip with him afterwards.

574 576 431

In their banquets they treat their friends in the ſame manner, only they do not torment them with heat, nor expect any preſents. When they entertain with the fat of ſeals or whales, they cut it out into ſlices; and the landlord kneeling before his company, with one of theſe ſlices in one hand and a knife in the other, thruſts the fat into their mouths, crying in a ſurly tone, *Ta na*, and with his knife he cuts off all that hangs out of their mouths, after they are crammed as full as they can hold. Whoever wants any thing from another may generally obtain it upon theſe occaſions; for it is reckoned diſhonourable for the gueſt to refuſe his generous landlord any thing. An inſtance of this happened, between a *Kamtſchadale* and a newly chriſtened Coſſack, juſt before I arrived, and was then the common ſubject of converſation. The Coſſack, according to the cuſtom of that country, had a *Kamtſchadale* to his friend, who he heard was poſſeſſed of a very fine fox-ſkin, which he greatly deſired, but which the *Kamtſchadale* would by no means part with. The Coſſack invited him to his hut, where he entertained him with vaſt plenty of victuals, and by throwing water upon burning-hot ſtones made the heat of the hut intolerable to his friend the *Kamtſchadale*, 'till at laſt he was obliged to beg for mercy.

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431 could not be agreeable to the *Kamtſchadale*: however, he ſeemed to be pleaſed with it, and to ſwear that he never thought it poſſible to make ſuch a heat, or that the Coſſacks could entertain their friends with ſo much reſpect; and declared, that though he looked upon his fox-ſkin as an ineſtimable rarity, yet he parted from it with pleaſure on that occaſion, and ſhould always remember the noble entertainment of his friend.

CHAP. XVI.

584 *Of their* COURTSHIP, MARRIAGES, *&c.*

WHEN a *Kamtſchadale* reſolves to marry, he looks about for a bride in ſome of the neighbouring villages, ſeldom in his own; and when he finds one to his mind, he diſcovers his inclination to the parents, deſiring that he may have the liberty of ſerving them for ſome time: this permiſſion he eaſily obtains, and, during his ſervice, he ſhews an uncommon zeal in order to ſatisfy them of what he can do. After having thus ſerved, he deſires liberty to ſeize his bride; and if he has happened to pleaſe the parents, his bride, and her relations, this is preſently granted; but, if they diſapprove of it, they give him ſome ſmall reward for his ſervices, and he departs. It ſometimes happens that theſe bridegrooms, without diſcovering any thing of their intention, engage themſelves in ſervice in ſome ſtrange village; and though every one ſuſpects their deſign, yet no notice is taken of it, 'till either he or his friend declares it.

When

24: Lansdell-639 M-2 (1879) 1882 Kamchadal
116, 157, 262, 574, 576

" The Kamchatdales are a people of much amiability and honesty. Their houses are always open to the stranger, whom they never weary of waiting upon, and from whom they soon forget an injury. (1)

1. Their hospitality is carried even to excess. They visit one another, for instance, during a month or six weeks, until the generous host, finding his stock exhausted, gives the hint by serving up a dish called 'tolkootha', a hodge-podge, composed of meat, fish, and vegetables; upon which the guests depart the following day. "

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574I continued on for Pouschin, twenty miles, and
576arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 to be found near *Ochotska*, where it is esteemed a valuable present.

226 The nets with which this fish[1] is caught are made of yarn about the thickness of sugar ropes; and the fishing begins about the middle of *May*, and lasts six weeks. The *Kamtschadales* esteem this fish so much, that the first they catch they bake and eat with great rejoicings. This custom is very disagreeable to the *Russian* inhabitants who hire the natives to fish for them; for however impatient the master may be to taste the new fish, the fishermen will have the first, looking upon it as a great sin if they do not eat it themselves, and with all due ceremonies.

136 The second kind is only called red fish, in *Ochotska*, narka. It is about 21 inches long, and flattish; its flesh is extremely red; its head very small; the snout short and sharp; the tongue bluish, with whitish sides; its back bluish, with black spots; its belly white; and its tail forked. Its breadth is about a fifth part of its length; and it has scales large and round, easily separating from the skin: it weighs about fifteen pounds. It is found in every river that runs either into the *Penschinska* or Eastern Sea, coming up in great shoals; and it is caught about the middle of *June*. The *eukol* that is made of it, though very pleasant, presently turns bitter; so that for the most part they either salt this fish, or boil it for its fat. There are two things worth notice concerning it: the first of which is, that part go before to the heads of the rivers, as if they were sent out to examine them, where some of them are caught before the shoals appear at the mouths. The second is, that this fish is more plenty in such rivers as run out of lakes than others: nor does it live long in the former, but hastens directly into the latter; in the depths of which it lies 'till the beginning of *August*, at which time it comes nearer the shore, and tries to get into these rivers that communicate with the lakes. Here the inhabitants catch them by nets, dams, or other methods.

1. [chivatsi]

The

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 583
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

538 for their diverſion in all their entertainments. They ſometimes
522 ſmoke tobacco, and tell ſtories; all which merriments are generally in the night time. They have alſo profeſſed buffoons or jeſters; but their wit is intolerably indecent and obſcene.

CHAP. XV.

574 *Of their* FRIENDSHIP, *and* HOSPITALITY

576
211

WHEN any one of this country ſeeks the friendſhip of another he invites him to his hut, and for his entertainment dreſſes as much of his beſt victuals as might ſerve ten people. As ſoon as the ſtranger comes into the hut, which is made very hot for his reception, both he and the landlord ſtrip themſelves naked: then the latter ſets before his gueſt great plenty of victuals; and while he is eating it the hoſt throws water upon red-hot ſtones, 'till he makes the hut inſupportably hot. The ſtranger endeavours all he can to bear this exceſſive heat, and to eat up all the victuals that were dreſſed; and the landlord endeavours to oblige his friend to complain of the heat, and to beg to be excuſed from eating all up. It is reckoned a diſhonour to the landlord, and a mark of niggardlineſs, if he ſhould be able to accompliſh this. He himſelf eats nothing during the whole time, and is allowed to go out of the hut; but the ſtranger is not ſuffered to ſtir 'till he acknowledges himſelf overcome. At theſe feaſts they over-eat themſelves ſo much, that for three days they cannot bear the
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CHAP. XVI.

584 *Of their* COURTSHIP, MARRIAGES, *&c.*

WHEN a *Kamtſchadale* reſolves to marry, he looks about for a bride in ſome of the neighbouring villages, ſeldom in his own; and when he finds one to his mind, he diſcovers his inclination to the parents, deſiring that he may have the liberty of ſerving them for ſome time: this permiſſion he eaſily obtains, and, during his ſervice, he ſhews an uncommon zeal in order to ſatisfy them of what he can do. After having thus ſerved, he deſires liberty to ſeize his bride; and if he has happened to pleaſe the parents, his bride, and her relations, this is preſently granted; but, if they diſapprove of it, they give him ſome ſmall reward for his ſervices, and he departs. It ſometimes happens that theſe bridegrooms, without diſcovering any thing of their intention, engage themſelves in ſervice in ſome ſtrange village; and though every one ſuſpects their deſign, yet no notice is taken of it, 'till either he or his friend declares it.

When

7:Lesseps T-3 (1787-88)1790 Kamchadal

417 retains its roundneſs, and preſents on one
576 ſide ſomething like ſteps, but they are ſo incommodious that I was more than once in danger of breaking my neck. In reality, whenever this vile ladder turns under the feet of thoſe who are not accuſtomed to it, it is impoſſible to preſerve an equilibrium; a fall muſt be the conſequence, more or leſs dangerous, in proportion to the height. When they wiſh perſons to be informed that there is nobody at home, they merely turn the ſtair-caſe, with the ſteps inward.

251 Motives of convenience may have ſuggeſted to theſe people the idea of building ſuch ſtrange dwellings, which their mode of living renders neceſſary and commodious. Their principal food being dried fiſh, which is alſo the nouriſhment of their dogs, it is neceſſary, in order to dry their fiſh, and other proviſions, that they ſhould have

CHAPTER VII.

000 **KAMSCHATKA** (*continued*).

We begin the river journey—Our rafts—Bad weather—Werchni Kamschatka—Melcova—A fish curral—Replenish our stores—Melcova church—*Kukluskas* and *parkas*—Extortionate demands of the natives—Curious marl cliffs—Mashura—Rows with the people—Leprosy—Piles of driftwood—Onset of the cold weather—Tschappina—We sight the great volcanoes—Our camp-life—Wild fruits—Renewed quarrels with the natives—An awkward dilemma—We win the game.

157/576 On the morning of September 1st our horse-boys departed on their return journey to Petropaulovsky. Whether it is owing to the depression peculiar to the country, so enlarged upon by Kittlitz, I cannot say, but there seems to be an utter lack of geniality among these people. They took their wages resignedly, and bade us an unceremonious adieu. Handshaking—the kindly custom in Scandinavia and other nothern countries on the termination of an engagement between master and man—appears to be unknown in Kamschatka. Perhaps after all it was better, for I do not suppose that any of us felt any great degree of affection for Vodki, and at a later period of our journey, fist-shakings would have better expressed our feelings towards the greater proportion of the people with whom we were brought in contact.

Having despatched a letter to the yacht with instructions as to the date of departure for the rendezvous at the mouth of the river, we went down to the stream to make the necessary preparations
322 for our voyage. The only species of boat used in the interior of
501 the country is the dug-out canoe,—a clumsily-shaped craft made

24: Lansdell-639 M-2 (1879) 1882 Kamchadal
116, 157, 262, 574, 576

" The Kamchatdales are a people of much amiability and honesty. Their houses are always open to the stranger, whom they never weary of waiting upon, and from whom they soon forget an injury. (1)

1. Their hospitality is carried even to excess. They visit one another, for instance, during a month or six weeks, until the generous host, finding his stock exhausted, gives the hint by serving up a dish called 'tolkootha', a hodge-podge, composed of meat, fish, and vegetables; upon which the guests depart the following day. "

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 extensive and luxuriant. The inhabitants provided
361 me with frozen fish, a delicacy I had so much en-
161 joyed on the Kolyma, with ducks and rein-deer meat, as also with dogs to resume the journey, which carried me to Kolpakofskoi ostrog, thirty miles, along a dreary sea beach. The village contains six dwellings and twenty people, who furnished me with dogs to Kroutogorova thirty miles further, a beautiful situation near the extremity of the almost level plane reaching from hence to Bolcheretzk. The famous Sopka, i. e. burning mountain, near Tchinsk, here becomes visible, and although the country is so rich, not a head of cattle is to be met with from Vorofskaya.

To Tchinsk are thirty miles of superior country, yet so deep in snow that we were obliged to take it by turns to go a head with snow shoes, at other times the government of a narte was thrown upon me, which I at first made but a bungling hand of. Tchinsk has twelve dwellings, it is consequently a considerable place! there are also two priests, brothers, whom I found drinking a
576 decoction of dried herb instead of tea. I felt angry with the Toion who had let slip eight dogs intended for me, and declined entering his dwelling, the strongest mark of displeasure which can be shown to these simple people. The poor fellow felt the slight so severely as he saw me entering another yourte, that I could not help regretting the deter-
361 mination I had made. To Soposhna it is thirty-five miles, which I travelled in company with the

000teen days in a storm, and he and all the party, men and dogs, were nearly perishing of hunger, having partaken of nothing but youkola (dried fish) for five days. Having exchanged dogs with another narte,
574I continued on for Pouschin, twenty miles, and
576arrived before noon. The Toion and I had a difference of opinion, which I shall ever regret, as it arose from my ignorance of the proper character of the Kamtchatdales. The poor man had heard of my coming, and had actually provided a good dinner for me, which I did not partake of, in consequence, of his not inviting me; another poor man actually did invite me, and I entered his more humble dwelling. The Toion was much surprised, and more vexed at this slight, which tended to lower him in the opinion of his subjects. The fact proved to be that the Toion is really one of the oldest Kamtchatdales, and was only complying with the ancient custom of the country, which is not to invite a stranger into his dwelling, considering that such stranger has the right not only to take it, but even to eject its owners. I left him with great regret that I could not stay another day to make him amends; I did, however, all I could, with this view.

133 Ganal, forty-five miles from Pouschin, a ro-
132 mantic country, we passed in high glee at the near
361 prospect of finishing my journey. The elevated ranges of mountains which form the Ganal Valley have all flat summits. To the valley succeeds a level

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions.

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries.

CHAP.

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown among them. On the other hand, they are careless, lustful, and
578 cruel: these vices occasion frequent quarrels and wars among them

sometimes

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 583
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 Although their manner of living be most nasty, and their
177 actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 In every *Ostrog*, or large village, by order of her Imperial
774 Majesty, is appointed a chief who is sole judge in all causes, ex-
871 cept those of life and death; and not only these chiefs, but even
R. the common people, have their chapels for publick worship.
177 Schools are also erected in almost every village to which the
622 *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

7:Lesseps T-3 (1787-88)1790 Kamchadal

142 The true Kamtſchadales are in general below the common height; their ſhape is round and ſquat, their eyes ſmall and ſunk, their cheeks prominent, their noſe flat, their hair black, they have ſcarcely any beard, and their complexion is a little tawny. The complexion and features of the women are very nearly the ſame; from this repreſentation, it will be ſuppoſed they are not very ſeducing objects.

157 578 476 The character of the Kamtſchadales is mild and hoſpitable; they are neither knaves, nor robbers; they have indeed ſo little penetration, that nothing is more eaſy than to deceive them, as we have ſeen in the advantage that is taken of their propenſity to intoxication. They live together in the utmoſt harmony, and the more ſo, it would ſeem, on account of the ſmallneſs of their number. This unanimity diſpoſes them to aſſiſt one another in their labours,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 831
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

7:Lesseps T-3 (1787-88)1790 Kamchadal

585 having been present at this ceremony, which,
177 as I was told, is nearly the same as in Russia.
582 I saw the new married couple, who appeared to be two children. I asked their age. The bridegroom was but fourteen, and the bride only eleven. Such marriages would be considered as premature in any country except Asia.

000 I had an extreme desire to see the town of Nijenei-Kamtschatka, and had long thought how to satisfy it; to have left the peninsula without visiting the capital, I should have considered as an unpardonable fault. My curiosity did not interfere with my resolution of travelling with all possible expedition. I was obliged indeed to make a circuit, but it was not so far as to occasion a delay of any consequence. Having concerted with M. Kasloff, who was anxious to procure every thing that could render my journey agreeable and safe, I engaged

to

C /242 cont./

582 171 835 The Chukchee marriage norms probably were the same as among the other nationalities of the same linguistic group as the Chukchee, namely, the Kamchadal and the Koryak. Concerning the Kamchadal, we have the testimony K 582 835 of Krasheninnikov in Opisanie zemli Kamchatki /A Description of Kamchatka/ (II, 169) that marriages were concluded, unhindered, between male and female cousins. As to the KK 582 835 Koryak, their norms were evidently /243/ under the strong influence of the Tungus peoples. Thus, while marriage to a niece was regarded as incestuous among the Chukchee, it C [835] was permitted among the Koryak. As among the Tungus, marriage simultaneously to two sisters is not allowed among KK 587 them. But the basic feature of Turanian marriage -- the obligation of marriage within one and the same clan -- has been perpetuated in the Koryak marriage in the institution of the sororate, or, as it is called by Iokhel'son, the double levirate. KK [171] [614] [177] As is well-known, the peculiarity of this institution, widespread even on the continent of North America (Algonkin, Thompson, Skidi, Pawnee), is expressed in the obligation of the widower to marry a woman from the clan of his deceased wife -- namely, a younger sister, cousin, or niece of the deceased (the last category -- nieces -- has evidently been adopted from the Tungus). Iokhel'son explains the origin of this institution by the desire to maintain religious ties that have been established between the spouses and by an unwillingness to admit an alien element to the sacred family hearth. Such an explanation could be very easily admitted, but then it is not understandable how the first, dead wife was admitted to the sacred hearth, especially since the Koryak have no knowledge of any kind of religious rituals like the KK 587 835 above-mentioned Chukchee ritual of administering the sacrament to the wife. On the other hand, this is explained much more simply by the institution of obligatory marriage. With the obligatory cousin-marriage, sisters and female cousins of one family belonged to the brothers and male cousins of another, and naturally, when the wife of a man

these vices occasion frequent quarrels and wars among them
sometimes with their neighbours, not from a desire of increasing 578
their power, but from some other causes; such as the carrying 589
off their provisions, or rather their girls, which is frequently
practised as the most summary method of procuring a wife.

Their trade is likewise not so much calculated for the acquisition 439
of riches as for procuring the necessaries and conveniencies of life.
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mushroons, or such trifles; and receive in exchange cloaths made
of deer-skins and other hides: among themselves they exchange 438
what they abound with for what they want, as dogs, boats, dishes,
troughs, nets, hemp, yarn, and provisions. This kind of barter 437
is carried on under a great shew of friendship; for when one 576
wants any thing that another has, he goes freely to visit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that person before: the landlord
is obliged to behave according to the custom of the country;
and bringing whatever his guest has occasion for, gives it him.
He afterwards returns the visit, and must be received in the same
manner; so that both parties have their wants supplied.

Their manners are quite rude: they never use any civil ex- 576
pression or salutation; never take off their caps, nor bow to one 157
another; and their discourse is stupid, and betrays the most con-
summate ignorance; and yet they are in some degree curious, and
inquisitive upon many occasions.

They have filled almost every place in heaven and earth with 771
different spirits, which they both worship and fear more than
God: they offer them sacrifices upon every occasion, and some
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worship him; but, in case of troubles and misfortunes, they
curse and blaspheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is so troublesome to them that

 without

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

better; the *Jakutski* alſo dig deep pits, in which they lay their fiſh, ſprinkling it with wood aſhes, and cover it with leaves at top, and over all put a layer of earth: this method is better than any of the former. The *Tunguſi* and Coſſacks of *Ochotſka* preſerve their fiſh in the ſame manner, with this difference only, that inſtead of wood aſhes, they uſe the aſhes of burnt ſea weed. They boil their freſh fiſh in troughs, take it out with boards, and letting it cool, eat it with a ſoup made of the ſweet graſs.

As for the fleſh of land and ſea animals, they boil it in their troughs, with ſeveral different herbs and roots; the broth they drink out of ladles and bowls, and the meat they take out upon boards, and eat in their hands. The whale and ſea horſe fat they alſo boil with roots.

There is a principal diſh at all their feaſts and entertainments, called *ſelaga*, which they make by pounding all ſorts of different roots and berries, with the addition of caviar, and whale and ſeals' fat.

Before the conqueſt they ſeldom uſed any thing for drink but water: but when they made merry they drank water which had ſtood ſome time upon muſhroons; but of this hereafter. At preſent they drink ſpirits as faſt as the *Ruſſians*: after dinner they drink water; and every one, when he goes to bed at night, ſets a veſſel of water by him, to which he puts ſnow or ice to keep it cold; and always drinks it up before morning. In the winter time they amuſe themſelves frequently by throwing handfuls of ſnow into their mouths; and the bridegrooms who work with the fathers of their future brides find it their hardeſt task to provide ſnow for their family in the ſummer time, for they muſt bring it from the higheſt hills be the weather what it will, otherwiſe they would ſo diſoblige as never to be forgiven.

When a bridegroom obtains the liberty of ſeizing his bride, he 583
ſeeks every opportunity of finding her alone, or in the company of a few people; for during this time all the women in the village are obliged to protect her; beſides ſhe has two or three different coats, and is ſwaddled round with fiſh nets and ſtraps, ſo that ſhe has little more motion that a ſtatue. If the bridegroom happens to find her alone, or in company but with a few, he throws himſelf upon her, and begins to tear off her cloaths, nets, and ſtraps; for to ſtrip the bride naked conſtitutes the ceremony of marriage. This is not always an eaſy taſk; for though ſhe herſelf makes ſmall reſiſtance, (and indeed ſhe can make but little) yet, if there happen to be many women near, they all fall upon the bridegroom without any mercy, beating him, dragging him by the hair, ſcratching his face, and uſing every other method they can think of to prevent him from accompliſhing his deſign. If the bridegroom is ſo happy as to obtain his wiſh, he immediately runs from her, and the bride as a proof of her being conquered, calls him back with a ſoft and tender voice: thus the marriage is concluded. This victory is ſeldom obtained at once, but ſometimes the conteſt laſts a whole year; and after every attempt the bridegroom is obliged to take ſome time to recover ſtrength, and to cure the wounds he has received. There is an inſtance of one, who, after having perſevered for ſeven years, inſtead of obtaining a bride, was rendered quite a cripple, the women having uſed him ſo barbarouſly.

As ſoon as the above ceremony is over, he has liberty next 585
night to go to her bed, and the day following, without any ceremony, carries her off to his own village. After ſome time, the bride and bridegroom return to the bride's relations, where the marriage feaſt is celebrated in the following manner; of which I was an eye-witneſs in 1739.

The

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

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the covering of their feet and legs. The women have an under- 291
garment which they commonly wear at home in the houſe, con-
ſiſting of breeches and waiſtcoat ſewed together. The breeches
are wide, like thoſe of the *Dutch* ſkippers, and tie below the knee;
the waiſtcoat is wide above, and drawn round with a ſtring.
The ſummer habits are made of dreſſed ſkins without hair; their
winter garment is made of deer or ſtone-ram ſkins with the
hair on. The undreſs or houſhold habit of the men is a girdle
of leather, with a bag before, and likewiſe a leathern apron to
cover them behind: theſe girdles are ſewed with hair of different
colours. The *Kamtſchadales* uſed formerly to go a hunting and 291
fiſhing during the ſummer in this dreſs; but now this faſhion is 177
changed, and below their girdles they wear linen ſhirts, which
they buy from the *Ruſſians*.

The covering of their feet and legs is made of ſkins of different 291
ſorts; in the ſummer time during the rains, they wear the ſkins
of ſeals with the hair outwards; but their moſt common covering
is the ſkin of the legs of the rein-deer, and ſometimes of
the legs of other beaſts, the ſhaggieſt they can find, to preſerve
them againſt the cold. But the fineſt buſkins, which both the 292
Coſſacks and *Kamtſchadales* uſe in their greateſt dreſs, are made 584
in the following manner: the ſole is of white ſeal-ſkin, the upper
part of fine dyed leather, the hind quarters of white dog-ſkin;
what comes round the legs is of dreſſed leather or dyed ſeal-
ſkins: the upper parts are embroidered. Theſe buskins are ſo
extraordinary, that if a batchelor is obſerved to wear them he is
immediately concluded to be upon a ſcheme of courtſhip.

They wear the ſame ſort of caps as the people of *Jakutſki*. 291
In the ſummer they have a ſort of hats of birch bark tied about 171
their head: the *Kuriles* uſe in the ſummer time caps made of
platted graſs. The women's head-dreſs is the perukes that we 302
formerly mentioned; and theſe were ſo dear to them, that when 177
they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

574 This the Coſſack would not grant 'till he had obtained a promiſe of the fine fox-ſkin. It ſhould ſeem, that this entertainment could not be agreeable to the *Kamtſchadale*: however, he ſeemed to be pleaſed with it, and to ſwear that he never thought it poſſible to make ſuch a heat, or that the Coſſacks could entertain their friends with ſo much reſpect; and declared, that though he looked upon his fox-ſkin as an ineſtimable rarity, yet he parted from it with pleaſure on that occaſion, and ſhould always remember the noble entertainment of his friend.

CHAP. XVI.

584 ### *Of their* COURTSHIP, MARRIAGES, *&c.*

WHEN a *Kamtſchadale* reſolves to marry, he looks about for a bride in ſome of the neighbouring villages, ſeldom in his own; and when he finds one to his mind, he diſcovers his inclination to the parents, deſiring that he may have the liberty of ſerving them for ſome time: this permiſſion he eaſily obtains, and, during his ſervice, he ſhews an uncommon zeal in order to ſatisfy them of what he can do. After having thus ſerved, he deſires liberty to ſeize his bride; and if he has happened to pleaſe the parents, his bride, and her relations, this is preſently granted; but, if they diſapprove of it, they give him ſome ſmall reward for his ſervices, and he departs. It ſometimes happens that theſe bridegrooms, without diſcovering any thing of their intention, engage themſelves in ſervice in ſome ſtrange village; and though every one ſuſpects their deſign, yet no notice is taken of it, 'till either he or his friend declares it.

When

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

When a bridegroom obtains the liberty of ſeizing his bride, he ſeeks every opportunity of finding her alone, or in the company of a few people; for during this time all the women in the village are obliged to protect her; beſides ſhe has two or three different coats, and is ſwaddled round with fiſh nets and ſtraps, ſo that ſhe has little more motion that a ſtatue. If the bridegroom happens to find her alone, or in company but with a few, he throws himſelf upon her, and begins to tear off her cloaths, nets, and ſtraps; for to ſtrip the bride naked conſtitutes the ceremony of marriage. This is not always an eaſy taſk; for though ſhe herſelf makes ſmall reſiſtance, (and indeed ſhe can make but little) yet, if there happen to be many women near, they all fall upon the bridegroom without any mercy, beating him, dragging him by the hair, ſcratching his face, and uſing every other method they can think of to prevent him from accompliſhing his deſign. If the bridegroom is ſo happy as to obtain his wiſh, he immediately runs from her, and the bride as a proof of her being conquered, calls him back with a ſoft and tender voice: thus the marriage is concluded. This victory is ſeldom obtained at once, but ſometimes the conteſt laſts a whole year; and after every attempt the bridegroom is obliged to take ſome time to recover ſtrength, and to cure the wounds he has received. There is an inſtance of one, who, after having perſevered for ſeven years, inſtead of obtaining a bride, was rendered quite a cripple, the women having uſed him ſo barbarouſly. 583

As ſoon as the above ceremony is over, he has liberty next night to go to her bed, and the day following, without any ceremony, carries her off to his own village. After ſome time, the bride and bridegroom return to the bride's relations, where the marriage feaſt is celebrated in the following manner; of which I was an eye-witneſs in 1739. 585

The

586 The bridegroom, his friends, and his wife, visited the father-in-law in three boats. All the women were in the boats, and the men being naked pushed them along with poles. About one hundred paces from the village to which they were going, they landed, began to sing, and used conjurations with tow fastened upon a rod, muttering something over a dried fish's head, which they wrapped in the tow, and gave to an old woman to hold. The conjuration being over, they put upon the bride a coat of sheep's skin, and tied four images about her: thus loaded she had difficulty to move. They went again into their boats, and came up to the village, where they landed a second time; at this landing-place, a boy of the village met them, and taking the bride by the hand led her, all the women following.

When the bride came to the hut, they tied a strap round her, by which she was let down the stairs, the old woman who carried the fish's head going before her. The head she laid down at the foot of the stairs, where it was trodden upon by the bride and bridegroom and all the people present, and then thrown into the fire.

All the strangers took their places, having first stripped the bride of superfluous ornaments. The bridegroom heated the hut and dressed the victuals which they had brought with them, and entertained the inhabitants of the village.. The next day the landlord, entertained the strangers with great superfluity, who on the third day departed; the bride and bridegroom only remained to work some time with their father. The superfluous dress which was taken from the bride was distributed among the relations, who were obliged to return them presents of far greater value.

587 The former ceremonies only relate to a first marriage; for in the marriage of widows, the man and woman's agreement is sufficient; but he must not take her to himself before her sins are

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
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A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 831
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

7:Lesseps T-3 (1787-88)1790 Kamchadal

133 This volcano, I was informed, had been at reſt for ſome time, and was ſuppoſed to be extinguiſhed, but it had lately kindled again. North-eaſt of this is a peak, the top of which appears to be the crater of a ſecond volcano, which continually throws up ſmoke, though I could not perceive the ſmalleſt ſpark of fire. The third is north-north-eaſt of the ſecond; I could not obſerve it as I wiſhed, a high mountain intercepting almoſt entirely my view. It derives its name from the village of Klutchefſkaïa, near which it is ſituated; and I was told that we ſhould paſs cloſer to it hereafter. The two other volcanos are called in like manner after the oſtrog of Tolbatchina, where we arrived in good time. This village is upon the Kamtſchatka, forty-four werſts from Chapina, but it contains no-
585 thing extraordinary. We were informed
177 that there had been a Kamtſchadale wedding in the morning. I regretted the not

 having

7:Lesseps T-3 (1787-88)1790 Kamchadal

585 having been present at this ceremony, which,
177 as I was told, is nearly the same as in Russia.
582 I saw the new married couple, who appeared to be two children. I asked their age. The bridegroom was but fourteen, and the bride only eleven. Such marriages would be considered as premature in any country except Asia.

000 I had an extreme desire to see the town of Nijenei-Kamtschatka, and had long thought how to satisfy it; to have left the peninsula without visiting the capital, I should have considered as an unpardonable fault. My curiosity did not interfere with my resolution of travelling with all possible expedition. I was obliged indeed to make a circuit, but it was not so far as to occasion a delay of any consequence. Having concerted with M. Kasloff, who was anxious to procure every thing that could render my journey agreeable and safe, I engaged

to

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

are taken away. This can only be done by ſome ſtranger's 587
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CHAP

7:Lesseps T-3 (1787-88)1790 Kamchadal

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428
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merce, and their decisions are either confirmed or annulled by the court to which they are carried by appeal. The Russian code of laws is the only one that is attended to; it is too well known to require that I should enter into particulars; and I could only repeat what has been already related by various historians and travellers better informed upon the subject than myself.

I ought however to add, that the property of the Kamtschadales devolves, of course, upon their decease, to the next heir, or to whomsoever it is bequeathed. The will of the testator is equally respected, and as literally adhered to, as it could be with those nations of Europe who are most scrupulous on the subject of successions.

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Divorces are neither practised or allowed among the Kamtschadales. The Russians seem to court their alliance, though it procures

7:Lesseps T-3 (1787-88)1790 Kamchadal

586
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177
.58

cures them no particular priviledge. Their motive is obvious. By frequent marriages, it is possible that before the end of the present generation, the race of the indigenes may be totally extinct.

681
R
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The penalty of death, abolished in all the dominions of the empress, is never inflicted in Kamtschatka. In their earliest migrations, the Russians, when accused of harassing the natives, were condemned to the knowt; the Kamtschadales also, for various offences, were liable to this cruel punishment; but it is no longer practiced. When the natives are guilty either of petty or capital offences, the punishment is whipping. It may be questioned whether they have gained by the change. The present mode of punishing them being more simple and expeditious, it is resorted to with less scruple, and is liable to frequent abuse.

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CHAP

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

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342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
● 592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1]

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not as high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 188). The storehouse on posts is known everywhere in Siberia, as well as in North America.

1. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

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The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 831
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

724 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

164 groups in Kamchatka after being exposed to syphilis, alcoholism, tuberculosis
177 and other consequences of Russian influence, show a marked increase over the former number. But these general observations are not corroborated by statistical figures.

114 The well-known investigator of Siberia, Patkanoff,[1] has shown that the groups
161 which had adopted a higher system of economical organization (cattle breeding,
177 agriculture, etc.) show a marked increase in population. But these groups do not include the Kamchadal. On the other hand the latest investigators of Kamchatka,
● 609 the Swedish traveler Bergman[2] and the Russian Gapanovich,[3] attest the same state of affairs as pictured by the author.[1] Only the infusion of fresh blood may save the Kamchadal from extinction. And the Kamchadal are conscious of it. I remember that some Russian adventurers coming from Vladivostok after the Russian-Japanese War were welcomed and adopted by the villagers of the western coast of Kamchatka, and the hunting rights of their territory were extended to them, provided they settle there.

[1] S. A. Patkanoff, *On the Increase of the non-Russian Population in Siberia*, published by the Imper. Russian Academy of Sciences, St. Petersburg, 1911 (in Russian).

[2] Sten Bergman, *Vulcane, Bären und Nomaden—Reisen und Erlebnisse im wilden Kamtschatka*, Stuttgart, 1926, Chapter: "Durch sterbende Dörfer längs der Küste des Ochotskischen Meeres," pp. 177–190. German translation from the Swedish.

[3] I. I. Gapanovich, *The Native Population of Kamchatka*, North Asia, Jour. Social Science, Moscow, 1925, No. 5, pp. 40–62 (in Russian).

1. [i.e., a decline in population due to Syphillis, etc. --Analyst]

5: Jochelson A-5 (1910-11) 1928 Kamchatka.

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

● 609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 Kaſloff to Apatchin*, where we arrived about midnight: the diſtance of Bolcheretſk from this oſtrog is forty-four werſts.

A few moments after our arrival a tempeſtuous wind aroſe, which would greatly have incommoded us, if it had happened during our route. It continued the reſt of the night and all the next day, which we were obliged therefore to ſpend at Apatchin.

Here we received the laſt adieux of the inhabitants of Bolcheretſk. I was ſtruck with their gratitude and attachment to M. Kaſloff, and the regret they expreſſed at leaving him, as well as their concern for me, and the intereſt they took in the ſucceſs of
609 my journey. I was the more pleaſed with their attentions, as I had obſerved while at Bolcheretſk, that the French nation was not

* I had paſſed through this village on my road to Bolcheretſk, and have deſcribed it, page 65.

held

7:Lesseps T-3 (1787-88)1790 Kamchadal

609 held in any high esteem by them; they had even so bad an opinion of us, that it was with difficulty they were brought to believe what had been told them of the politeness and cordiality of the crews of the French frigates to the inhabitants of Saint Peter and Saint Paul. In proportion however as they heard their countrymen extol our conduct, their prejudice grew weaker. I endeavoured by my conversation and behaviour to destroy it entirely. I dare not flatter myself to have succeeded; but it appeared to me that a complete change at last took place in their sentiments respecting us.

609 The disadvantageous impression which
114 they had imbibed of the character and genius of our nation, originated in the perfidy and cruelty exhibited in the person of the famous Beniowsky in this part of the peninsula. This slave called himself a Frenchman, and acted like a true Vandal.

His

7:Lesseps T-3 (1787-88)1790 Kamchada'

000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

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The oſtrog of Machoure, before the introduction of the ſmall-pox, was one of the moſt conſiderable in the peninſula; but the ravages of this cruel diſeaſe, have reduced the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

7:Lesseps T-3 (1787-88)1790 Kamchadal

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men and women, are chamans, or believers in the witchcraft of these pretended sorcerers. They dread to an excess the popes or Russian priests, for whom they entertain the most inveterate hatred. They do all they can to avoid meeting them. This is sometimes impossible, and in that case, when they find them at hand they act the hypocrite, and make their escape the first opportunity that offers. I attribute this fear to the ardent zeal which these priests have doubtless shown for the extirpation of idolatry, and which the Kamtschadales consider as persecution. They accordingly look upon them as their greatest enemies. Perhaps they have reason to believe, that in wishing to convert them, the overthrow of their idols was not the only thing these missionaries had in view. These popes probably set them no example of the virtues upon which they declaim. It is suspected that their object is the acquisiton of wealth,

rather

7:Leaseps T-3 (1787-88)1790 Kamchadal

dales in general, for the civility with which
157/609 they treated me. I have already mentioned their mild and hospitable character, but I have not been sufficiently minute respecting the instances of regard which these good people gave me, and I recall with pleasure the rememberance of their kind reception. There was not, I believe, an individual chief of any ostrog, that did not make me some trifling present. Sometimes it was a sable or fox skin, and sometimes fruit or fish, and such other objects as they conceived would be most agreeable to me. One would have supposed that they had resolved, by their attentions to me, to repair the injustice which they had so long committed against the French name. They often thanked me for having undeceived them upon the subject; and sometimes again were tempted to regret it, when they considered that they should see me no more, and that it seldom

7:Lesseps T-3 (1787-88)1790 Kamchadal

609 happened that any of my countrymen viſited their peninſula.

We left Karagui at one o'clock in the morning of 2 March. The weather was tolerably calm, and continued ſo during the whole day. The only inconvenience we met with, was the not being able to croſs, as we had hoped to do, a bay which the tempeſt of the preceding evening had cleared of its ice: we were obliged to go round it. This bay has conſiderable depth, is eight or ten werſts wide, and appeared to run in the direction of north-eaſt and ſouth-weſt. The ice was only broken up as far as the mouth, where it became ſolid again, and extended into the ſea. With the circuit which we were obliged to make, we travelled this day about fifty werſts.

Upon the approach of night, we ſtopped in

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

28: Sarytschew--66-67 T-1 (1789-90) 1806 Kamchadal
116, 222, 262, 609, 825

"On our journey we experienced the most friendly treatment from the Kamtschadales, who not only entertained us with the utmost cordiality, but made us liberal presents of partridges, fresh fish, frozen keta, jukol, berries, and roots, [67] which are collected in great quantities from the mouse-holes, and form one of their principal aliments.

In autumn, they go into the fields in search of these roots, and as soon as they find hollow ground, by stamping, they dig down, and lay open the store-rooms of these animals. They do not, however, empty them entirely, but leave the mice a third at least of their provision, probably with a view of not driving away such useful creatures. They terrify each other, indeed, with the saying, that the mouse which is deprived of all its sustenance, will hang itself in despair on the next tree; a tale which may perhaps have originated in the circumstance of a mouse having been entangled by accident in the branches of a tree, and having hung there till it died."

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 destitute of society; the Creoles of their being
609 kept in a state of poverty; while the Kamtchat-
631 dales bitterly lament the association with either the
R one or the other. It has been observed that St.
177 Peter and St. Paul's can never be a good town,
.63 owing to its want of wood. It may be asked, why then was the seat of government removed from a more eligible place, Nishney Kamtchatsk, or why was it not removed to the centre of agriculture and population, so far as either can be said to exist? It has been already changed three times, and is, I be-
631 lieve, destined to another removal. Kamtchatka
R neither can nor will thrive so long as its chiefs are
177 sent for five years only: such a short period
.63 scarcely allows them the time of doing good, however well disposed they may be. The general mode of occupying the allotted term may be thus described. The first year is employed in looking about and forming places for the improvement of the country, the amelioration of the condition of the aborigines, &c.: the second year is passed in making reports, stating opinions, &c.: the third year brings the reply of the government, directing or authorizing the mode of administration: the fourth is employed in preparing or at most in acting upon such orders: while the fifth and last year is generally employed in preparing to return to Europe, and levying a parting contribution:—and thus the whole five years are, more or less, taken up in trading and accumulating as much

1: Kolarz J-4 (no date) 1954 RR1 Siberia
Kamchadal R43
Russian Islands R21

KAMCHADALS

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Soviet propaganda has never been very outspoken about the native people of South and Central Kamchatka – the Kamchadals – for a very good reason. Even Soviet historians could hardly claim that friendship between Russians and Kamchadals (or Itelmeny, as they are now called) ever existed in the past. It is a well-established fact that the presence of Russian Cossacks in Kamchatka provoked endless struggles and revolts in the early part of the eighteenth century. While it is true that many Cossacks lost their lives, it is equally undeniable that the first Russian colonizers wiped out the majority of the Kamchatka natives. Only the fact that Kamchatka is rather unsuitable for European colonization saved the Kamchadals from dying out entirely. While their number, which was about 30,000 before the Russian conquest, had dropped to about one-sixth, their relative strength was still fairly important at the end of the nineteenth century. The census of 1897 showed that the Kamchadals then formed over 48 per cent of the population of their homeland. Russian colonization under the Soviet régime changed things rapidly, to the detriment of the Kamchadals. In 1928 they comprised only one-quarter of Kamchatka's population, and in 1939, at the maximum, only 12 per cent.

In absolute figures there were 4,217 Kamchadals in 1926, but only 868 of them were able to speak their national language; the others were, as far as their culture is concerned, completely Russianized. In Petropavlovsk, the capital of Kamchatka, only 69 Kamchadals were counted in the 1926 census.

'ALEUTIAN NATIONAL DISTRICT'

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East of Kamchatka are the Commander Islands, consisting of Behring Island, where the famous explorer, Vitus Behring, died in 1741, and Copper Island (Medny). The two islands now form the 'Aleutian National District', which was set up in 1932. There are not more than 400 Aleutians in the Soviet Union. Practically all of them live in the 'District' which is to impress the 5,800 Aleuts of Alaska.

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Soviet propagandists have always taken great pride in the cultural successes of the 'Aleutian National District'. Its primary claim to fame is the fact that it was the first administrative unit of the Far East which achieved 100 per cent literacy. However, this triumph was not such a remarkable one as it may seem. Two thirds of the Soviet Aleuts were literate as early as 1926 at a time when the other Far Eastern tribes included only between 1 and 10 per cent of literate people. So the Soviet authorities can hardly take credit for an achievement which in all likelihood was

their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

They look upon that river near which their village is situated, as the inheritance of their tribe; and if one or two families at any time desire to live separate from their native village, they build themselves huts upon the same river, or some branch that falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

6:Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[776] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[793] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[764] The bodies of dead adults were given to the dogs to eat; children were
[756] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[797] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist government and raids on the tax treasury. Large uprisings broke out in 1706,
669 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half
648 of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

724 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

THE ITEL'MENS

V. V. ANTROPOVA

General Information

178 The ancient population of Kamchatka—the Itel'mens—have preserved their language and sense of ethnic identity only in a few villages of the southern part of the Tigil'skiy Rayon of the Koryak National Okrug. By language, the Itel'mens belong, together with the Chukchi and Koryaks, to the northeastern group of paleo-Asiatic peoples. The census of 1926–27 set
161 the number of Itel'mens at 814.

The term Itel'men means "resident," "living man." In the documents
101 and literature of the 18th century and later, the Itel'mens were called Kamchadals.

With the exception of the residents of a few villages, the descendants of the Itel'mens have completely merged with the Russians. Officially, they are considered Russians, but the term "Kamchadals" is still used in colloquial speech. However, it is applied not only to the Russified descendants of the Itel'mens, but also to the descendants of Russian Cossacks and peasants settled in Kamchatka in the 18th century. Before the Revolution, these component elements of the Kamchadals belonged to different social classes (Russ. "sosloviya"), but in everything else the Russian-speaking Kamchadals constituted a homogeneous group.

The nearest neighbors of the Itel'mens—the reindeer Koryaks—called them by the same name as the coastal Koryaks: Nymylyn, or "village resident." In the 18th century, the reindeer Koryaks called the Itel'mens Khonchalo, from which some students trace the origin of "Kamchatka" and "Kamchadal."

In the early 18th century, the Itel'mens were scattered virtually over the entire peninsula, from its southern tip to 58° N, interspersed in the north with the Koryaks. The largest concentration was in the valley of the Kamchatka River. At that time, a distinct group of Itel'mens, called "Near Kurilers," lived on Cape Lopatka and the first islands of the Kurile group. This group lived in direct contact with the Ainu (Kurilers) and assimilated with them to a large extent. In physical type, language and certain features of their way of life, the "Near Kurilers" were somewhat different from either the Ainu or the Itel'mens.

197 In the past, the Itel'mens were divided, according to language, into
619 northern, southern and western. The former consisted of Itel'mens living along the Kamchatka River and the east coast, from the village of Uka in the

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

343 their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which
361 are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

229 They look upon that river near which their village is situated,
621 as the inheritance of their tribe; and if one or two families at
403 any time desire to live separate from their native village, they
614 build themselves huts upon the same river, or some branch that falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

ranny of the Eastern conquerors, as the *Lopari*, *Ostiaks*, and *Samojeds* were driven to the extremities of the North by the encroachments of other *European* nations. If *Kamtschatka* had not been inhabited before the *Tungusi* had got a settlement, it is probable they would have fixed here, as being safer from the dangers of any sudden attacks of their enemies. 174

Thus it appears likely, that the *Kamtschadales* lived formerly in *Mungalia* beyond the river *Amur*, and made one people with the *Mungals*, which is farther confirmed by the following observations, such as the *Kamtschadales* having several words common to the *Mungal Chinese* language, as their terminations in *ong*, *ing*, *oang*, *chin*, *cha*, *ching*, *ksi*, *ksung*; it would be still a greater proof if we could show several words and sentences the same in both languages; but not to insist only upon the language, the *Kamtschadales* and *Mungals* are both of a small stature, are swarthy, have black hair, a broad face, a sharp nose, with the eyes falling in, eyebrows small and thin, a hanging belly, slender legs and arms; they are both remarkable for cowardice, boasting, and slavishness to people who use them hard, and for their obstinacy and contempt of those who treat them with gentleness.

CHAP. III

Of the ANCIENT STATE *of the Natives of* Kamtschatka.

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BEFORE the *Russian* conquest they lived in perfect freedom, having no chief, being subject to no law, nor paying any taxes; the old men, or those who were remarkable for their bravery, bearing the principal authority in their villages, though none had any right to command or inflict punishment.

578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 177 Although their manner of living be most nasty, and their actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 794 871 R. 177 In every *Ostrog*, or large village, by order of her Imperial Majesty, is appointed a chief who is sole judge in all causes, except those of life and death; and not only these chiefs, but even the common people, have their chapels for publick worship. Schools are also erected in almost every village to which the *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

361

View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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but objects cannot be ſeen through them. The leaves of talc are more clear, and approach nearer to glaſs; in the mean time they are not ſufficiently tranſparent for perſons without to ſee what is going on within: this is manifeſtly no inconvenience to ſuch low houſes.

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Every oſtrog is preſided by a chief, called *toyon*. This kind of magiſtrate is choſen from among the natives of the country, by a plurality of voices. The Ruſſians have preſerved to them this priviledge, but the election muſt be approved by the juriſdiction of the province. This toyon is merely a peaſant, like thoſe whom he judges and governs; he has no mark of diſtinction, and performs the ſame labours as his ſubordinates. His office is chiefly to watch over the police, and inſpect the execution of the orders of government. Under him is another Kamtſchadale, choſen

7: Lesseps T-3 (1787-88) 1790 Kamchadal

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The governors in these various ostrogs are not accountable to one another for their administration, not even inferior officers to their superiors; the authority of each is limited to the inhabitants of his own district; which has doubtless induced the empress to appoint an inspector general, *capitan isprawnick*, whose business is to visit every year all the Kamtschadale villages, receive their complaints, examine their differences, judge them, and punish such as are guilty; in short to maintain order and peace among them. It is also a duty of his function to encourage commerce, particularly their fishing and hunting, to inspect the regular payment of their tribute, the stock of provisions of each individual for his own support, and that of his family, the repairs of the bridges and roads, which unfortunately are very few, and kept in very bad order. In a word, the inspector general should consider it as incumbent upon him to introduce

among

7:Lesseps T-3 (1787-88)1790 Kamchadal

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among these people the manners and customs of Russia. This important office was confided, in 1784, to baron de Steinheil, who fixed his residence at Nijenei. Affairs calling him elsewhere, he was succeeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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The government is not purely military; there are some tribunals established for hearing and deciding causes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtschatka; they are subject to the jurisdiction of the court of Okotsk, in the same manner as in Russia the magistrates of the subordinate towns hold from those of the capital, in whom the final decision rests. There is beside at Bolcheretsk a kind of consular jurisdiction, or vocal tribunal, called in Russia *Slovesnoi-soud*. The judges are merchants; they take cognizance of all disputes relating to commerce,

291/854 they have a deer ſkin girt, which ſerves as a ſaſh. The women carry their children on their back by means of a ſtring, which paſſes round the forehead of the mother and under the buttocks of the child.

171/622 The toyon of Karagui, at whoſe houſe we lodged, was an old rebel. It was with ſome difficulty he had been brought back to his duty, and he gave us ſome uneaſineſs by his poſitive refuſal to procure us fiſh.

The manners of the inhabitants of this oſtrog are very ſimilar to thoſe of the neighbouring Koriacs. This analogy is as conſpicuous in their idiom as in the dreſs of their children. I had an opportunity of remarking it the day after our arrival.

Underſtanding that there were two hordes of rein deer Koriacs at no great diſtance, we ſent immediately a meſſenger to them to

requeſt

.22: Guillemard T-2 (1882) 1886 Kamchadal

563 The head-man of the village received us on landing—a person
622 of far higher class than any we had hitherto met, and apparently of unmixed Russian blood. He was the keeper of a small store, and owned a capital little log-built house, which we found uninhabited, and apparently intended for the reception of passing travellers. This he at once placed at our disposal. Tired and wet as we were, the prospect of pitching camp in a sea of mud was not a pleasant one, and breaking through our usual rule, we accepted his offer with pleasure. Before long we were enjoying the unaccustomed luxury of a chair, and were able to skin our birds in tolerable comfort for the first time since leaving Petropaulovsky.

167 Melcova owes its origin to an experiment. With the view of
563 encouraging the cultivation of the land and of making something
241 more of the country than a mere hunting district, where the in-
361 habitants caught enough salmon during the summer to enable them to go after the sables in the winter, a small colony of Russian
R peasants were settled here in 1743, who were to devote themselves
177 entirely to agriculture. The result has been to a certain extent
. 24 successful, for the community is a tolerably flourishing one, and with its population of over two hundred, is the most important settlement in Upper Kamschatka. It may, nevertheless, be doubted if the cultivation of the land has contributed to any great extent to its success, for, from the severity and uncertainty of the climate, the prospects of the farmer are as little encouraging here as they are anywhere, and there are probably the full average of sable-hunters in Melcova. But there are small fields and gardens, and a number of cows, which combine to give the place a more home-like and settled aspect than is usual in most Kamschatkan villages.

563 A great portion of our own interest in the place centred, I must confess, in the store. Here, in a space of about twelve feet by eight, we found flour, tea, sugar, candles, axes, and a few odds and ends for sale, but there were no sables or other furs as we had hoped. We had run short both of tea and sugar, and were

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
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"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

177 Their dress is the same as formerly, that for the
291 winter season being made of the skins of beasts;
435 but in summer they wear nankeens, and at present there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. IV

Of the OSTROGS, *or* HABITATIONS, *of the* Kamtſchadales. 361

UNDER the name of *Oſtrog* we underſtand every habitation conſiſting of one or more huts, which are all ſurrounded by an earthen wall or palliſadoe.

The huts are built in the following manner: they dig a hole in the earth about five feet deep, the breadth and length of which is proportioned to the number of people deſigned to live in it. In the middle of this hole they plant four thick wooden pillars; over theſe they lay balks, upon which they form their roof or cieling, leaving in the middle a ſquare opening which ſerves them for a window and chimney; this they cover with graſs and earth, ſo that the outward appearance is like a round hillock; but within they are of an oblong ſquare, and the fire-place is in one of the long ſides of the ſquare: between the pillars round the walls of their huts they make benches, upon which each family lies ſeparately; but on that ſide oppoſite to the fire, there are no benches, it being deſigned for their kitchen furniture, in which they dreſs their victuals for themſelves and dogs. In theſe huts where there are no benches, there are balks laid upon the floor, and covered with mats. They adorn the walls of their huts with mats made of graſs. 342 352

They enter their huts by ladders commonly placed near the fire hearth, ſo that when they are heating their huts the ſteps of the ladder become ſo hot, and the ſmoke ſo thick, as almoſt 342 417 626

to

342 to ſuffocate any one who is not inured to bear it: but the
417 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 taions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpeeially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 river *Ochotſka* has three mouths; the New mouth, the Old mouth, and the *Bulginſkaya* out-let.

The New mouth is dry, except at the time of a great inundation; and even then veſſels cannot enter it. The preſent *Ochotſkoy* fort is built between the New and Old mouths, almoſt upon the beach; and the former, which is now called the old fort, was ſix verſts from the ſea. This place is called *Ochotſkoy* poſt, and commonly *Lama*; and has under its juriſdiction all *Kamtſchatka*, and the coaſt of the *Penſchinſka* ſea to the frontiers of *China*. For which reaſon the tax-gatherers are all ſent out from hence; and the tax, when gathered, is immediately brought from all other places hither, where it is firſt appraiſed, and then ſent into *Jakutzk*. Formerly the *Ochotskoy* fort was poorly inhabited, and under the juriſdiction of *Jakutski*, but it is much increaſed ſince the *Ruſſians* have made this the port for their paſſage by ſea to *Kamtſchatka*.

631 631 R 177 .65

000 This place is better built than any of the other forts, the houſes being good and regular, particularly thoſe belonging to the government, in which the officers of the *Kamtſchatka* expeditions reſided. In my time there was neither a church nor a fortification, but they were building both. Though the country be as barren as *Kamtſchatka*, yet its inhabitants are better furniſhed with every thing, becauſe goods and proviſions brought from *Jakutski* are ſold here cheaper by one half. Though plenty of corn is brought here, yet no freſh meat is to be got, except wild fowl and veniſon, and that ſeldom. Fiſh in this place is almoſt as plenty as in *Kamtſchatka*, except the *Chaveecha*, which they bring hither from thence. The greateſt want in this place is that of good paſturage near them; therefore the inhabitants cannot breed cattle. They have tried many times to keep them upon the river *Avi*, but with great loſs, moſt of them dying for want of ſuſtenance. Time will ſhew whether the *Jakutski* people, that are ſettled along the rivulets which fall into the *Ochotska*,

133 was not necessarily mutual. Man might follow the mammoth in order to hunt
172 him, but the mammoth had no need of man. Thus the remains of mammoth do not indicate that man lived in the same place, if there is no direct proof of it. However, the presence of the mammoth may postulate to climatic conditions fit for man to live in, and it remains for the future to find remains of the palæolithic man; but for the time being one may be right to hold to the theory of the peopling of Kamchatka in Recent Times, especially since no palæolithic artifacts were discovered in my excavations, and I feel authorized to say that the late peopling of Kamchatka may corroborate the theory of the reemigration of the Siberian Americanoids from America after the last glaciation subsided. To be fair, however, I must add that I had no time to make excavations in the Kamchatka River valley and that no regular excavations were made in the territory of the other Americanoids—the Koryak, Chukchee and Yukaghir.

GEOGRAPHY AND ADMINISTRATIVE DIVISIONS

131 The country of the Kamchadal—or the part of the Kamchatka Peninsula to the
● 631 south, from the Amanino village to the west, and Osernaya River to the east—was a part of the Primorskaya Province. In 1909 a new province of Kamchatka was
R. created, which included 6 districts: Okhotsk, Gishiginsk, Anadyrsk, Chukotsky,
177.63 Commandor Islands and Petropavlovsky. The last district is the territory of the Kamchadal. The city of Petropavlovsk was made the capital of the province and the seat of a newly appointed Governor.

162 The former Territory of the Kamchadal is inhabited by 8,037 people, of which 3,370 are Russians, 3,555 Kamchadal, 802 immigrated reindeer Koryak and Tungus and 300 Chinese, Koreans and Japanese. There were also 10 Europeans and Americans.[1]

177 The Kamchadal have become Russianized and only the inhabitants of seven
197 villages (between Amanino and Sopochnöye) of the western coast have preserved their native language—the western dialect of the Kamchadal language—and the inhabitants of the village Sedanka on the Tighil River speak the northern dialect. There were formerly four Kamchadal dialects, and at present even the Kamchadal, who speak two dialects, use more of a Russian-Kamchadal slang than the pure Kamchadal. The younger generation is learning Russian in the schools, and soon the Kamchadal language will be forgotten entirely, as was the case with the dialect of the Kamchatka River and with the southern dialect, which was spoken between the Great River (Bolshaya Reka) and Lopatka Cape. While the northern dialect of the Kamchadal on the Tighil River contains many Koryak words, the southern dialect had an intermixture of Kurilian words. Krasheninnikoff called the southern Kamchadal people Kurilians.

177 The Kamachdal had been and still remain a genuine fishing tribe. They
226 did not adopt from their Koryak neighbors the reindeer, although they were

[1] According to official data of 1911. During the summer fishing season, Kamchatka's shores have many thousands of temporary dwellers. Russians who operate canneries and saleries bring thousands of laborers. The number of Japanese fishers at the time of my stay in Kamchatka was estimated at more than 10,000. About 250 Japanese schooners were lying near the shores and about ten Japanese steamers were coming from and leaving for Japan. According to the convention concluded after the Russian-Japanese War the Japanese were authorized to fish everywhere in Kamchatka waters except bays and river-mouths, but by bribing the guards they used to fish also in the inner waters.

hunting the wild Kamchatka variety of reindeer.

7: Lesseps T-3 (1787-88) 1790 Kamchadal

436 R. 177.43 of ten roubles; the rouble, and half rouble. There are very few ſilver coins below this value; a proof that no article of merchandize is expected to produce leſs than half a rouble. Copper and paper money have not yet reached this peninſula. A variety of old ſilver coins of the times of Peter I. Catherine I. and Elizabeth, abound here. A conſiderable branch of commerce may be made of them; the ſilver is purer and more valuable than that of common coins.

465 R. 177.46 The pay of the ſoldiers or Coſſacs is fifteen roubles a year. The officers ſent by government to ſo diſtant a country, receive double ſalaries.

631 R. 177.63 The peninſula of Kamtſchatka, when major Behm preſided at Bolcheretſk, was under the juriſdiction of the government general of Irkoutſk. Upon the departure of this governor, whom the Engliſh ſaw upon

7:Lesseps T-3 (1787-88)1790 Kamchadal

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upon their first arrival in 1779, captain Schmaleff was deputed in his room, and enjoyed for a year the power and satisfaction of doing good to the inhabitants, who entertain for him an equal respect and gratitude. M. Renikin supplied his place in 1780, and was recalled in 1784 for reasons which I am obliged to suppress. At this period the Kamtschatka department was reunited to that of Okotsk. The chiefs and officers of the different ostrogs have since been subject to the orders of the governor at Okotsk, and to the decisions of its courts of justice; these are themselves subordinate and accountable to the governor general residing at Irkoutsk. The present commanding officer, or governor, at Bolcheretsk, which was formerly the capital of Kamtschatka, is now merely a sergeant; the name of the person I left there was *Rastargouieff*, and he had been nominated to the office by M. Kasloff.

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7: Lesseps T-3 (1787-88) 1790 Kamchadal

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The governors in theſe various oſtrogs are not accountable to one another for their adminiſtration, not even inferior officers to their ſuperiors; the authority of each is limited to the inhabitants of his own diſtrict; which has doubtleſs induced the empreſs to appoint an inſpector general, *capitan iſpravnick*, whoſe buſineſs is to viſit every year all the Kamtſchadale villages, receive their complaints, examine their differences, judge them, and puniſh ſuch as are guilty; in ſhort to maintain order and peace among them. It is alſo a duty of his function to encourage commerce, particularly their fiſhing and hunting, to inſpect the regular payment of their tribute, the ſtock of proviſions of each individual for his own ſupport, and that of his family, the repairs of the bridges and roads, which unfortunately are very few, and kept in very bad order. In a word, the inſpector general ſhould conſider it as incumbent upon him to introduce

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7:Lesseps T-3 (1787-88)1790 Kamchadal

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among theſe people the manners and cuſtoms of Ruſſia. This important office was confided, in 1784, to baron de Steinheil, who fixed his reſidence at Nijenei. Affairs calling him elſewhere, he was ſucceeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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The government is not purely military; there are ſome tribunals eſtabliſhed for hearing and deciding cauſes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtſchatka; they are ſubject to the juriſdiction of the court of Okotſk, in the ſame manner as in Ruſſia the magiſtrates of the ſubordinate towns hold from thoſe of the capital, in whom the final deciſion reſts. There is beſide at Bolcheretſk a kind of conſular juriſdiction, or vocal tribunal, called in Ruſſia *Slovefnoi-ſoud*. The judges are merchants; they take cognizance of all diſputes relating to commerce,

7 Lesseps T-3 (1787-88)1790 Kamchadal

133 ſels may ſafely anchor, and be ſheltered from the ſouth, the weſt, and the north winds: The ſouth of its entrance does not afford ſo good a harbour, as it is ſaid to have various ſand banks; I was obliged to truſt to report, the ice and the ſnow preventing me from obtaining any better information.

361 / 631 We travelled this day ſeventy werſts, and came in the evening to Karagui, which is upon an eminence, and affords a view of the ſea. It has only three yourts and twelve balagans, at the foot of which the river Karaga paſſes. This river pours itſelf into the ſea at the diſtance of a few gun ſhots from the oſtrog, which is the laſt in the diſtrict of Kamtſchatka; a hamlet a hundred werſts farther, and containing but few Kamtſchadales, not being included within its limits.

As we were obliged to wait here for a

29:Cochrane T-2 (1821-22) 1824 Kamchadal

157 dences for the balagans or places which they use
221 for drying their fish. Thus the summer is employed
177 in preparing food against the winter, which latter is taken up in the chase. Beyond this the Kamtchatdale is still the same lazy, drunken, servile animal as formerly. Their ancient language is not forgotten, but is so far out of use that there are few who do not speak Russian. Most of the aborigines are baptized, and may be said to live as the Russians do. The number of real Kamtchatdales who retain their ancient usages is small. They reside on the northern coasts beyond Tygil and Nishney Kamtchatsk. Hospitality is the most striking feature in their character; but they are also distinguished by their strict adherence to truth, and their honesty is proverbial. Without being forward to complain of ill-treatment, they will fearlessly recount it when
622 questioned. They are in part governed by their
631 own Toions or Chiefs, but an annual visit is made
R to each village by the Ispravnick or Chief Judge,
177 as well for the purpose of collecting sables as of
.63 administering justice.

Their dress is the same as formerly, that for the
177 winter season being made of the skins of beasts;
291 but in summer they wear nankeens, and at present
435 there is hardly a Kamtchatdale who does not wear a shirt. The women have also adopted the Russian head-dress, the articles for which are procured
181 from the pedlers at a most exorbitant rate. It is sur-
435 prising that this people who have now been feeling

29:Cochrane T-2 (1821-22)1824 Kamchadal

000 with a file of English newspapers, magazines, &c. which employed me till the 1st of July, when we were ready to sail.

361 St. Peter and St. Paul's, the chief city of the peninsula of Kamtchatka, contains forty-two dwellings, besides fifteen edifices belonging to the government, an old church, and the foundation of a new one. Among the public buildings are to be reckoned magazines for bread, for powder, for sailors, for convicts, for wine, and for arms; a guard-house, smithy, hospital, chancery, school, and a building for the chief and his assistant. All, however, with the exception of the hospital, sailor's barracks, and school, are at best, like the rest of the city, emblems of misery and wretchedness. I have never seen even on the banks of the Frozen Sea so contemptible a place, hardly meriting the name of a village, much less that of a city; yet such is the place which has been so eulogized from one end of the world to the other. The erection of hospitals, of schools, of churches, and the diffusion of happiness, have been extravagantly vaunted of in magazines and reviews, in defiance of the most lamentable facts of a very opposite description.

563 I cannot imagine what a governor has to do in
609 such a place; a civil commissary would surely
631 have been enough. The only people, in my opi-
R nion, who can be called happy, are the Koriaks,
177 because they are independent. The Russians com-
.63 plain of being sent to such a vile place, utterly

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 destitute of society; the Creoles of their being
609 kept in a state of poverty; while the Kamtchat-
631 dales bitterly lament the association with either the
R one or the other. It has been observed that St.
177 Peter and St. Paul's can never be a good town,
.63 owing to its want of wood. It may be asked, why then was the seat of government removed from a more eligible place, Nishney Kamtchatsk, or why was it not removed to the centre of agriculture and population, so far as either can be said to exist? It has been already changed three times, and is, I be-
631 lieve, destined to another removal. Kamtchatka
R neither can nor will thrive so long as its chiefs are
177 sent for five years only: such a short period
..63 scarcely allows them the time of doing good, however well disposed they may be. The general mode of occupying the allotted term may be thus described. The first year is employed in looking about and forming places for the improvement of the country, the amelioration of the condition of the aborigines, &c.: the second year is passed in making reports, stating opinions, &c.: the third year brings the reply of the government, directing or authorizing the mode of administration: the fourth is employed in preparing or at most in acting upon such orders: while the fifth and last year is generally employed in preparing to return to Europe, and levying a parting contribution:—and thus the whole five years are, more or less, taken up in trading and accumulating as much

29:Cochrane T-2 (1821-22) 1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters will be found, who will prefer to administer justice with clemency and honor, to the degrading of their characters by a mean and derogatory traffic. If an increase of rank, double pay and provisions, an extra pension, and the most unlimited powers are not sufficient to ensure a just discharge of the duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-1-3
116, 563, 635, 651 Russia
636.63

"In the year 1783 a mandate from her Imperial Majesty proclaimed Neizshni Kamtshatka a city; ordained it the seat of government of the country under the chancery of Ochotsk offered privileges to such merchants as chose to become burghers; and instituted courts of justice, establishments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitshik (mayor); and his establishment consists of a secretary and writers; a Kaznatshestva (exchequer) for the receipt of the revenue, and payment of officers; a Zemskoi Sud (court of the interior), of which the Ispravnik, or captain of the district, is president, and in this court one of the natives is a member to represent the whole body; with a magistracy to regulate mercantile concerns, as already mentioned. [311]

The salaries allowed by government to the different officers are as follow:

The Gorodnitshik	- -	600 rubles.
His Secretary	- -	300
The Kaznatshae	- -	400
Ispravnik	- -	400

other officers less in proportion; some of the writers having only 24 rubles per annum.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-2
116, 563, 635, 651 Russia
636.63

Prices of Articles 1793	Kazan.	Kamtshatka.
Linen for shirts per arsheen*	18 cop.*	120 cop.

*A pood is 40 lb. Russ, or 36 lb. English. 100 copeaks make a ruble; a copeak may be reckoned little more than a farthing sterling. 9 arsheens make 7 yards.

Boots per pair	-	-	3 rub.	12 to 18 rub.
Thread stockings do.	-	-	125 cop.	4 to 5 rub.
Soap per lb.	-	-	6 cop.	60 to 100 cop.
Candles do.	-	-	8 cop.	80 to 100 cop.
Tea do.	-	-	2 rub.	12 rub.
Sugar	-	-	50 cop.	3 rub.
Leaf tobacco per lib.	-	-	5 cop.	3 rub.
Rye flour, per pood*	-	-	50	500 cop.
Wheat do.	-	-	60	800 cop.
Rice per lib.	-	-	10	100 cop.

From this statement of prices, the impossibility of an officer living upon his salary will plainly appear; he is therefore compelled to find out some method of increasing his income, at the expence of the poor natives.

One of the captains of the district, who came here with his wife and family, finding himself extremely distressed, appropriated [312] the tribute of one year to his own use, and wrote a letter to the Empress; stating, that the severity of the climate, the prices of every article of life, and the wants of his family, had compelled him to make use of the tribute, consisting of such a number of sables and fox skins for their backs and bellies, which he rather chose to do than rob the poor natives (the only alternative). He requested her pardon, and an appointment where he could live upon his salary; and the industry of his family (of no benefit in Kamtshatka) might help to repay the amount of the articles that he had appropriated to his own use. The Empress ordered the governor to give him such an appointment, and pardoned him on account of the good reasons that he assigned; but this pardon was not to be regarded as a precedent; for such mercy was not to be extended to any future person who should dare to act in the same manner.

The magistracy receives its income from the burghers and meshanin. The latter are privileged pedlers (and the colonists are of the number); the former are divided into three classes, according to the extent of the capital that they give in, upon which they pay one per cent."

636.10 - 636.88

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c.; than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

27: Sauer--310 T-2 (1789-93) 1802 Kamchadal
116, 177, 241, 563. Russia
636.24

"About the latter end of the year 1779, or the beginning of 1780, Major Behm returned to St. Petersburg. Major Reinikin succeeded him in the command, and wished to introduce among the natives the culture of the earth, but could not succeed; he brought potatoe seeds with him; first grew them in his own garden; and from thence they were abundantly distributed all over the peninsula, with every species of garden vegetables, which are cultivated with great success by the Russian inhabitants."

28: Sarytschew--70 T-1 (1789-90) 1806 Kamchadal
116, 177, 436 Russia
636.43

"Copper money is scarcely known in Kamtschatka, silver coin only being in use; but small notes or assignations are beginning to get introduced."

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-1-3
116, 563, 635, 651 Russia
636.63

"In the year 1783 a mandate from her Imperial Majesty proclaimed Neizshni Kamtshatka a city; ordained it the seat of government of the country under the chancery of Ochotsk offered privileges to such merchants as chose to become burghers; and instituted courts of justice, establishments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitshik (mayor); and his establishment consists of a secretary and writers; a Kaznatshestva (exchequer) for the receipt of the revenue, and payment of officers; a Zemskoi Sud (court of the interior), of which the Ispravnik, or captain of the district, is president, and in this court one of the natives is a member to represent the whole body; with a magistracy to regulate mercantile concerns, as already mentioned. [311]

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116, 563, 635, 651 Russia
636.63

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27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-3
116, 563, 635, 651 Russia
636, 63

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The magistracy receives its income from the burghers and meshanin. The latter are privileged pedlers (and the colonists are of the number); the former are divided into three classes, according to the extent of the capital that they give in, upon which they pay one per cent."

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-1-2
116, 161, 563, 651 Russia
636.65

"The number of inhabitants may be stated as follows, men, women and children:

At the town (Neizshnoi) - -	548
Ostrog Tigil - -	338
Virchnoi - -	226
Bolshoiretsk - -	235
And at the harbour of St. Peter and St. Paul - -	85
Colonists - - -	255
Russians - - -	1687
Kamtshadals - - -	1053
Total - - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the list of those who are tributary, according to the revision [307] made during the government of Mr. Reinikin, who succeeded Major Behm. The revisor (in 1784), by some unaccountable mistake, has frequently noted the name of one and the same person as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonstrances, but in vain: this imposition, however, is the least

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-2
116, 161, 563, 651 Russia
636.65

of their sufferings. They are compelled to pass the greater part of their time in procuring necessaries for their visitors. The governor makes his annual circuit round the peninsula, and receives a present from every individual; the captain of the district goes his rounds twice; different deputations from the courts of justice, soldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horses are quartered at each village, and the inhabitants must provide a stock of hay for them. Thus the Kamtshadal scarcely finds time to collect a supply of food in the fishing season for his own family."

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
636, 65

"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

27: Sauer--293-294 T-2 (1789-93) 1802 Kamchadal
116, 161, 361 Russia
636.71

"The villages on this coast [CMC: i.e., the western coast of Kamchatka] are, Tigilsk, Itshinsk, and Bolshoiretsk (situated on the Tigil, Itsha, and Bolshoia rivers). Of these the former is the most considerable, containing 45 wooden houses, and one church. The Russian charts place it in latitude 57° 55'. This, which they call a fortified town, is surrounded by wooden palisades, and was built in 1752. The num-[294]ber of inhabitants are 338, including women and children. Itshinsk also contains a church, and about 10 houses, with 50 inhabitants. Bolshoiretsk contains 37 houses, and the total number of inhabitants are 235. Beside these, there are eight inconsiderable villages, containing each three or four houses, on the west coast."

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 361, 563 Russia
636.71

"The little harbour of St. Peter and St. Paul is to the north [CMC: in Avacha Bay]: its south bluff cape is extremely conspicuous; and the buildings upon the spit of land before it are clearly discernible. This harbour is in every respect convenient for giving ships all kinds of repair, as also for obtaining fire-wood and fresh water. If all its good qualities are considered, I think it may be pronounced the most convenient in the world. Six or eight ships of war might be conveniently moored in it head and stern: the only inconvenience (if it may be so called) lies in the amazing toughness of the ground; for if the anchor be heavy, and out any time, it will probably be found necessary to heave a strain on the ship to weigh it. The south of the harbour is bounded by a narrow neck of low land running out from the eastern shore in a western direction, covered with wooden houses and balagans; at the extremity of which is the entrance, 38 fathoms wide, and six and a half deep: ships may pass so close to this point of land, that a man may leap on shore. The west side is a projecting narrow mountain of moderate height trending to the south, terminating in a bluff head, upon which it a battery of three guns, and a flag. [297] From this extremity a shoal extends south about 100 fathoms. The north, which is the head of the harbour, is bounded by a valley, in which are the government magazines, barracks, and the dwelling houses of the commander and chief inhabitants. To the east, it is bounded by lofty mountains covered with wood to the very summit; namely birch, mountain-ash, hawthorn, dwarf-cedar, rose-bushes, &c. On this side

27: Sauer--296-297 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 137, 361, 563 Russia
636.71

are several springs of very pellucid water rushing down the mountains into the harbour, and these are very convenient watering places.

The bay is bounded to the north-west by the extensive plains of Avatsha, where two rivers discharge themselves into it; namely, the Avatsha and Paratounca. At the estuary of the former, the Kamtshadals, who formerly resided in the harbour, have their present habitations; while the troops of the garrison possess their late dwellings."

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian. 197 619

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44). 172

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens. 175 114 [648] [323]

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture. 105 [114]

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks. [361] [226]

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish. [286] [251]

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils. [224] [323]

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison. [225] [278]

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden [222]

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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Village, 18th-century engraving.

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At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position [554] in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own [614] to anyone." Every village was inhabited by members of one clan. The [342] semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production [592] and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the [562] husband's moving into the wife's home, or at least temporary residence [591] in the father-in-law's house; marriage by working for the bride, which [583] involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration [182] in the beginning of the 18th century. Constant wars among individual clans [721] and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy [648] and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common [671] with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic [796] cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[931] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[928] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
526 erty in the hands of some individuals. As early as the 1730's, there were
526 toyons (elders) who lent sables to their kinsmen to enable them to pay their
426 tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 341 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

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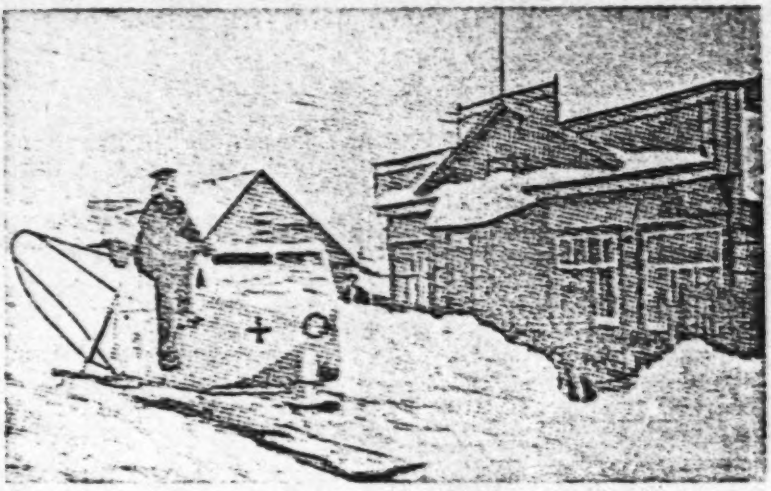

Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
[493] ever, the milk yield was very low, and livestock mortality was high.

From the Russians, the Itel'mens obtained improved means of pro-
175 duction: firearms, nets, etc. Stone and bone implements were completely
179 abandoned in favor of metal ones. Russian clothing and utensils began to
648 come into use. The primitive semidugout was gradually (and by the begin-
ning of the 19th century, completely) replaced by wooden board dwellings, and occasionally by log houses of the Russian type. Simultaneously with the absorption of Russian culture by the Itel'mens, a reverse process was also taking place in the 18th and 19th centuries. Soldiers, Cossacks and
[563] peasants, who were systematically being resettled on the peninsula after the middle of the 18th century, married Itel'men women and acquired some elements of their way of life and culture. The result was that peculiar population of the peninsula which became known, as we have pointed out earlier, under the name of Kamchadals and was often mistakenly classified as Itel'men.

In the early 20th century, the condition of the Itel'mens deteriorated in
175 consequence of the development of the Japanese capitalist fishing industry
648 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
222 spawning runs caused almost annual failures of the native catch and led to
231 inevitable famines.

Contemporary Life of the Itel'mens

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648 During the civil war in the Far East, the Itel'mens actively helped the guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

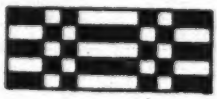
6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

At present, the Itel'mens differ little in economy, culture and life from the neighboring Russian population of Kamchatka. They are united in fishing collectives which are well equipped with technical gear. A certain role in the Itel'men collectives is also played by sea hunting and the hunting of fur animals. 177 648 474 433

The land area devoted to gardening is growing yearly. Potatoes are grown everywhere in sufficient quantity to provide food until the next crop. The collectives have ploughs, harrows, haying-machines, and other agricultural implements. The ploughing is now done with horses. The stocks of cattle are gradually being improved; the preparation of hay is widely practiced, and warm barns have been built for the livestock. Some of the collectives, like the "Red Partisan," not only produce enough milk for their own needs, but also supply the workers and employees of the Tigil'skiy Rayon. [241]

Today, Itel'men collective-farm members live in houses of the Russian type—spacious, bright, with large glass windows and plastered walls. The house furnishings are the same as those of the Russian collective-farm members. 177 648 342 474

In all the Itel'men villages there are medical institutions, clubs and schools. The instruction is in Russian, since all Itel'mens know Russian as well as their native language. Various institutions are staffed with native personnel. Dozens of Itel'mens, both men and women, are working as teachers, accountants, and nurses in hospitals, and are also serving in elective Party and Soviet posts. 177 648 36 [191] [463]



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K 342 175 177 Shortly thereafter, however, in 1790, Ssarytschof reported /354/ from his journey through the country that there were no longer any earth yurts anywhere and that instead of them Russian-style houses (log houses, so-called isba) had been built everywhere; only the summer dwellings of the Kamchadal, which are likewise peculiar, had been retained (1). On the basis of a remark by

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1. Sarychev", Putesh. po Sieverovost. chasti Sibiri, Pt. I, p. 179.

Mamia Rinsô on his voyage in 1809 from Deren down the Amur, one might think at first glance that the same thing had happened among the Gilyak on the Amur. Coming from the territory of the S'janta (Olcha), when he entered the territory of the Smerenkur (Gilyak) at Horo (Chjare), he noticed that from there on people, dwellings, implements, and way of life changed and became exactly the same as on Krafto (Sakhalin) (2). One might

2. Siebold (Nippon, VII, p. 177). Cf. also p. 248 above.

think, therefore, that at that time the Gilyak on the Amur were still living in earth yurts as on Sakhalin. But this is impossible, for, as mentioned above (p. 466), four years earlier Krusenstern had found Chinese winter-yurts among the Gilyak on the northern tip of Sakhalin, that is, at the farthermost point, as far as these dwellings are found even today. If, in addition, one considers the fact that Mamia Rinsô was traveling in summer, there can be no doubt but that his above remark referred to the summer dwellings, which in fact, as we shall see in a moment, are quite different among the Gilyak on the Amur and on Sakhalin than among their neighbors, the Olcha, and the other Tungusic Amur-peoples. Conditions in Kamchatka and in the lower Amur region were too different to have produced an equally rapid disappearance of national peculiarities in both places. In the former, the Russians, after conquering the region, settled

K 342 177

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K [648]

K 342 177 648 /354 cont./
permanently among the natives, who were greatly decimated by the previous bloody battles, building their houses in their own way and entering into permanent,peaceful relations with the Kamchadal, even mixing with them more and more. It is therefore not surprising that their style of building soon became the customary one throughout the region. Matters were different in the lower Amur region among the Chinese and Manchu: a conquest and colonization of this region by the peoples named have never taken place. As was discussed above in detail (3),

G 342 177 439 [648]

3. See pp. 119, 142-144 above.

it instead was and is visited only from time to time by individual Manchu officials and Chinese merchants who, in a few places where they have their own houses, always take up residence in the houses of the natives, and this only among the Tungusic Amur-peoples, for the Gilyak have even denied the Chinese traders entry into their region. Hence, it undoubtedly must have taken a long time before the Chinese winter-yurt reached the Gilyak from the Chinese on the Sungari, spreading down this river and the Amur from people to people, and the trading expeditions which the Goldi, Olcha, and Gilyak from ancient times to now have conducted annually to the Chinese along the Sungari and on which they have had repeated opportunities to become familiar with and to appreciate the type of construction of the Chinese house, must certainly have contributed most of all to its adoption and further spread among the Amur peoples.

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G 342 /355/ In April and May, when spring comes, the Gilyak find it necessary to abandon their winter dwellings and to move into their summer dwellings. First the inhabitants of the earth yurts are driven out of their houses, because they are made wet and uninhabitable by the water running in both from the top and the sides as a consequence of the melting snow and the thawing of the ground. The Chinese winter-yurts, set on level ground, are more serviceable, even in spring and summer, though even in them water sometimes comes through or over

000 river *Ochotſka* has three mouths; the New mouth, the Old mouth, and the *Bulginſkaya* out-let.

The New mouth is dry, except at the time of a great inundation; and even then veſſels cannot enter it. The preſent *Ochotſkoy* fort is built between the New and Old mouths, almoſt upon the beach; and the former, which is now called the old fort, was ſix verſts from the ſea. This place is called *Ochotſkoy* poſt, and commonly *Lama*; and has under its juriſdiction all *Kamtſchatka*, and the coaſt of the *Penſchinika* ſea to the frontiers of *China*. For which reaſon the tax-gatherers are all ſent out from hence; and the tax, when gathered, is immediately brought from all other places hither, where it is firſt appraiſed, and then ſent into *Jakutzk*. Formerly the *Ochotskoy* fort was poorly inhabited, and under the juriſdiction of *Jakutski*, but it is much increaſed ſince the *Ruſſians* have made this the port for their paſſage by ſea to *Kamtſchatka*.

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000 This place is better built than any of the other forts, the houſes being good and regular, particularly thoſe belonging to the government, in which the officers of the *Kamtſchatka* expeditions reſided. In my time there was neither a church nor a fortification, but they were building both. Though the country be as barren as *Kamtſchatka*, yet its inhabitants are better furniſhed with every thing, becauſe goods and proviſions brought from *Jakutski* are ſold here cheaper by one half. Though plenty of corn is brought here, yet no freſh meat is to be got, except wild fowl and veniſon, and that ſeldom. Fiſh in this place is almoſt as plenty as in *Kamtſchatka*, except the *Chaveecha*, which they bring hither from thence. The greateſt want in this place is that of good paſturage near them; therefore the inhabitants cannot breed cattle. They have tried many times to keep them upon the river *Avi*, but with great loſs, moſt of them dying for want of ſuſtenance. Time will ſhew whether the *Jakutski* people, that are ſettled along the rivulets which fall into the *Ochotska*,

000 *Ochotska*, be more ſucceſsful. The want of cattle, in ſome meaſure, is made up by the deer, which the natives have in greater plenty than in *Kamtſchatka*; but theſe are more uſed for carriage than food. They alſo travel with dogs, but not ſo commonly as in *Kamtſchatka*.

There were four tranſport-veſſels built here: namely; the Fortune, in which in the year 1737 I went to the Great River, and which was loſt ſoon after; the boat Hauriel, which was uſed alſo in long ſea voyages for ſome time; the Galliot *Ochotska*; and a ſmall veſſel, which was not then launched. The paſſage by ſea uſed formerly to be only once a year; namely, in the autumn, when the tax-gathers went from *Ochotſky* to *Kamtſchatka*, and brought back the tax the next year: but now they go oftener.

651 R 177 .65

000 The paſſage from the *Ochotska* to the Great River is directly ſouth-eaſt. Between the fort *Ochotskoy* and the river *Amur*, whoſe heads are in the *Ruſſian* dominions, the following rivers run into the ſea: the firſt is *Urack*, 24 verſts from the *Ochotska*. It is to be obſerved, that in the time of the *Kamtſchatka* expeditions the proviſions were uſed to be ſent down this river upon flat-bottomed boats to the *Ochotska*; for which reaſon they built a dock 50 verſts from its mouth, where the ſailors and the *Ochotſkoy* Coſſacks uſed to build veſſels for the above expeditions, and ſend the ſaid proviſions from the *Iudomſkoy* Kreſt, or croſs, to that place over land by horſes or deer in ſledges. But this way of carriage by water was attended with great trouble, loſs of time and people; for the river is very rapid, rocky, and full of cataracts, and not always deep enough, except in the ſpring, or after great rains: and as theſe additional waters run ſoon off, they are obliged to watch every opportunity of ſending down the loaded veſſels; which if they omit, they muſt often wait a long time.

There never was a fleet ſo happy in this navigation as not to loſe ſome veſſels either by rocks or cataracts, many of which are ſo

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

103 the natives *Kurbi*, and by the *Russians Kuriles*. The exact
131 number of those islands cannot be ascertained; but, according to the verbal accounts which were gathered from the *Kuriles*, and the natives of the southernmost islands, and from the *Japanese*, who were driven by distress of weather upon the coast of *Kamtschatka*, they are reckoned to be twenty-two. Perhaps they do not take the small ones into this number: for by the account of captain *Spanberg*, who went as far as *Japan*, there appears to be a great many more; but as the said captain found it difficult to give them *Russian* names, all of them that had any relation to the *Kurilskoy* names, except the two that lay nearest to *Matma Kunatin*, were allowed to keep their former appellations.

133 *Schumtschu* is the nearest island to the *Kurilskaya Lopatka*,
136 and extends in length from the north-east to the south-west
161 50 versts, and in breadth about 30. This island is full of
651 mountains, out of which, as also from the small lakes and marshes, many little rivers run into the sea. In some of them are found different kinds of salmon, and several other fish, but not in such plenty as to furnish the inhabitants with provisions for a winter. Upon the south-west point, near the streight that is between this and the second *Kurilskoy* island, are three *Kurilskoy* settlements, that contain only 44 inhabitants; some of whom pay the taxes in sables and foxes, but the majority pay them in sea-beavers' skins.

The inhabitants of this island, as well as those of the *Kurilskaya Lopatka*, are not the right *Kuriles*, but are of the race of the *Kamtschadales*: for some dissentions having arisen between the inhabitants of that nation, soon after the *Russians* entered the country, a large party of them retired here and to the *Lopatka*; where they became connected, by mutual inter-marriages, with the people of the second island, whose particular customs they have adopted, and from thence have received the name of *Kuriles*.

The

177 ed: those of the remote islands brought to them all sorts of
439 lackered wooden ware, scymitars, silver rings which they wear in their ears, and cotton stuffs; and from them in return, they used to take chiefly, eagles' feathers, which are used in ornamenting their arrows: this seems very probable; for I had from this island a lackered waiter, a bason, a *Japanese* scythe, and a silver ring; all which I have sent to the *Imperial* Chamber of curiosities. These articles the *Kuriles* could have from no other place than from *Japan*.

361 The *Kuriles* of this island[1] have their habitations near the south-west point, upon a lake five versts in circumference, out of which a small rivulet, called *Petpu*, runs into the sea.

133 Both these islands are subject to frequent and terrible earthquakes, and inundations: one of these calamities happened in the year 1737, about the time of my coming to *Kamtschatka*; and another in *November*, 1742. We shall relate the first circumstantially in its proper place; but as for the second, though it was great, yet I have not been informed of the mischief and destruction it occasioned; for it happened after my departure from *Kamtschatka*; and Mr. *Steller* makes no mention of it in his account.

The third *Kurilskoy* island is called *Sirinki*, and lies south-west of *Paromusir*. The fourth island is called *Onnecutan*. This island is less than *Paromusir*, and lies from north-east to south-west, as that does, from which they row to it in one day.

101 It has many inhabitants of the same origin with the *Kuriles*
651 of *Paromusir* island, as was said before, out of which some families go over to visit the inhabitants of *Paromusir*, and vo-
651 luntarily pay a tribute in beavers and foxes. The author concludes from this, that the rest of these islands would not refuse to pay the tribute, if proper persons were sent to bring them under subjection; and give them assurances, by kind

1 [Parmushir]

kind representations, of the clemency of her Imperial majesty, with promises that she would protect and defend them from their enemies. 651

Neither I nor Mr. *Steller* could have an oppportunity to inform ourselves particularly of the rest of the *Kurilski* islands; therefore we shall give the accounts of them that were communicated to me by Mr. *Muller*, which he had from the *Japanese*, who were shipwrecked upon the coasts of *Kamtschatka*. 133

Between Mr. *Muller*'s account and our's, there is some difference; for in his, *Onnecutan* is called the sixth island. However this might happen only on account of his reckoning the small islands also, which the *Kuriles* do not. According to his description, beyond the *Paromusir*, or the second *Kurilskoy* island, there are three more islands; *Sirinki* is reckoned the third; *Uyakoopa*, the fourth; and the *Kukumita*, or *Cucumiva*, the fifth; the *Sirinki* and *Kukumita* are smaller than *Uyakoopa*, which island is remarkable for a high mountain. The said islands are placed in a triangle; the *Uyakoopa* lying most north, and fartheft west; and the *Sirinki*, with regard to the former, south-east, and in the same longitude with *Paromusir*; and the *Kukumita* a little further southward than the *Uyakoopa*. It seems that these islands in the General *Russian* map are expressed under the names of *Diacon*, *St. Iliab*, and *Galanta*, which are placed in a triangle, though their situation is not exactly the same as in the above description. The sixth *Kurilskoy* island, according to Mr. *Muller*, is called *Muska* and *Onnecutan*. The seventh is *Araumakutan*, is uninhabited, and there are some burning mountains as in *Kamtschatka*. On the eighth island *Sujaskutan*, which is as large as the former, some few people inhabit who are not taxed. From this island to the west lies the ninth called *Emarka*; and thence on the south-west side is the tenth island *Masbachu*, which is small and uninhabited; and on the south-east side from the *Sujaskutan* there is a small island *Ebachu*, which is reckoned the eleventh.

The

The ſables of *Kamtſchatka* excel all other ſables of *Siberia*, both in largeneſs, thickneſs of hair, and brightneſs; but in point of blackneſs they do not come up to thoſe of *Olekmine* and *Vitime*: however their other properties are ſo valuable, that the *Kamtſchatka* ſables have by much the preference; and in *China*, where they know how to improve the colour, fetch ſo great a price that few of them are brought into *Ruſſia*. The ſables of *Tegbil* and *Oukine* are moſt eſteemed, and are ſometimes ſold for thirty rubles a pair. Mr. *Steller* ſays, that the worſt are hunted about the *Lopatka* and *Kurilſkoy* ſeas. It often happens that the worſt kind of ſables ſhall have their tails ſo black and thick haired, that they will ſell dearer than any other. 136

Before the conqueſt of *Kamtſchatka* there was ſo great a plenty of ſables that one hunter would kill ſeventy or eighty in a year; and that not for the ſake of the furr, but the fleſh, which they eſteem very delicious. The inhabitants at that time willingly agreed to pay their tribute in ſables; and were glad to receive a knife for eight, and an ax for eighteen. Some merchants have gained in one year by furrs only more than thirty thouſand rubles. The ſables are ſtill in much greater plenty here than in any other country, as is obſerved by every one who has been upon the ſpot, and compared their tracts upon the ſnow with what are ſeen either upon the rivers *Lena* or *Beloy*, and this even in the neighbourhood of the forts. And if the people of *Kamtſchatka* were as induſtrious in hunting as thoſe about the *Lena*, they could ſell a great many more than they; but ſuch is their natural lazineſs, that they never kill more than what they muſt pay in tribute, and what will pay their debts. They look upon him as an extraordinary good hunter that kills ſix or ſeven ſables in a winter; and ſeveral are not able to furniſh their tribute furrs, but muſt borrow either from the *Ruſſian* Coſſacks, or ſome more induſtrious hunter of 224 651 435 136 224 461 426 185

 their

fess any thing more than what they had done voluntarily before. 651

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity. 692 797 R. 177 .65

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.* 361 R. 177 .71

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Teghil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

and ſometimes they played 'till both parties had pawned their cloaths for brandy. Such way of living, one may eaſily believe, was attended with great confuſion; but what the poor ſlaves ſuffered is almoſt incredible, being obliged ſometimes to change their maſters twenty times a day. 563 567

The invention of making ſpirits happened accidentally. The Coſſacks, after the manner of the natives, made a great proviſion of all kinds of berries for the winter. It happened ſometimes that they began to ferment in the ſpring, and could be uſed no other way than in drink. This drink was obſerved to cauſe drunkenneſs when taken in great quantities; upon which they began to diſtil it, and, to their great ſurpriſe and pleaſure, found that it produced a good ſpirit. They have ſince diſcovered that they could make brandy from an infuſion of the ſweet graſs, and now they have ſpirits in plenty. Their method of preparing this herb for diſtillery we have already explained. 563

Thoſe that are curious to know whence the Coſſacks ſettled here obtained their riches, muſt be informed that they owe them to the following circumſtances: firſt, when they conquered the natives they made all the plunder they could: ſecondly, every party of Coſſacks, that was employed in gathering the taxes, obliged each tributary native, beſides the crown tax, to give them four fox-ſkins and one ſable, which they divided among themſelves: thirdly, by their commerce with the natives, whom they obliged to pay a very high price for every trifle they furniſhed them with. Although, at preſent, the Coſſacks are forbidden to take any thing more than the crown tax, yet they are ſtill allowed to ſet what price they pleaſe upon their goods; and indeed they ſell them, or change them for furrs, at very great profits, and ſometimes for proviſions, nets, and boats. Without this they would not be able to live upon their ſmall pay, which is no more than what they uſed to receive at *Jakutſki*, and, both in money and proviſions, does not amount to above 14 563 661 651 439 R. 177 .65 563

rubles

441 The goods ſold at *Kamtſchatka* at prime-coſt ſcarcely exceed 10 or 12,000 rubles, but the ſales amount to 30 or 40,000 rubles; and if a merchant carries theſe *Kamtſchatka* goods to the fair upon the frontiers of *China*, he may receive double the price he buys them at; ſo that this commerce may eaſily appear to be very advantageous.

439 651 437 The goods that are brought out of *Kamtſchatka* conſiſt of furrs, ſuch as ſea beavers', ſables', foxes', and a few otters' ſkins. As there was formerly no money in this country, the way of trading was in exchange for furrs; and now they have money, they fix the price by the ſkins, reckoning a good fox-ſkin at a ruble. All goods brought out of *Kamtſchatka* pay 10 per cent. duty, but the ſables 12.

CHAP. VIII.

000 *The Different* ROADS *between* Jakutſki *and* Kamtſchatka.

THOUGH it may at firſt appear needleſs to mention all the different roads to *Kamtſchatka*, eſpecially as ſeveral of them are now no more uſed, yet, upon due conſideration it will be found to ſerve for an illuſtration of the different ſettlements of the *Ruſſian* colonies, and to ſhew what people are ſubject and pay taxes to each of theſe ſettlements. It will alſo explain the manner of reducing theſe people and making them tributary, and deſcribe the difficulties of this journey, although there had been no danger from an enemy, in which the tax-gatherers were continually expoſed to hunger and cold in an unknown country, whereby many of them loſt their lives. The Coſſacks were only able to make this journey

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 669 R. 177.66

sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

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The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

● 651 669 R. 177.65

In the winter of 1712 the Chief Antzyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropavlovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts with secretly lifting doors.[1] The Russians were met with simulated pleasure. Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

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Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and also as storehouses.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

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The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

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The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 287.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

651 R. 177.65

particularly tragic, as the sable, for whose fur the Russian demand was greatest, was an animal which inhabited Kamchatka and not the territories to the north of it.

The question as to how tribute was to be levied was later put on a definite basis by the so-called First Tribute (Yassak) Commission of 1762–1766. The reform introduced by the commission was based on the following principles: (1) The tribute is to be paid by a representative for the clan or group; the further apportionment of the tribute among the individual hunters is left to the natives themselves. (2) The representative of the group is to deliver the tribute in person to the administrative center; collectors are abolished. (3) Subject to the tribute are native men from sixteen to sixty years of age, who are to be called "workers" or "tax souls." (4) Payment may be made in furs or in money, the amount being calculated in money for each person, and varying in the case of fur payments according to locality, the nature of the animals and the current valuation of the latter. These principles, with some additions and a general lowering of the amount of tribute to be paid, were accepted by the Second Tribute Commission of 1828–1835. The age of workers was limited to men from eighteen to fifty. The number of workers of every clan was fixed by the census. The last census for this purpose was taken in 1859.

The fur-tribute, however, continued to be levied and to serve as a way to abuses for officials until the February revolution of 1917, when the Provisional Government under Kerensky abolished altogether this form of taxation of the Siberian natives.[1]

[1] The author contributed to the decree by his articles in the press on the Yassak question.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 himſelf, and with his claws and teeth laid hold of the noſe of one of the dogs, who had no reaſon to be pleaſed with his reception. As we were deſirous of taking the animal alive, we kept back the dogs; the ſable quitted immediately his hold, and ran up a tree, where, for the third time, the nooſe, which had been tied anew, was preſented to him; it was not till the fourth attempt that the Kamtſchadale ſucceeded *. I could not have imagined that an animal, who has ſo much the appearance of cunning, would have permitted himſelf to be caught in ſo ſtupid a manner, and would himſelf have placed his head in the ſnare
224 that was held up to him. This eaſy mode
433 of catching ſables, is a conſiderable reſource
651 to the Kamtſchadales, who are obliged to

* M. Kaſloff, who preſided in this chace, had the politeneſs to make me a preſent of this ſable, called in this country *ſobol*, and promiſed to add it to another, that I might bring a couple with me to France.

to

651 pay their tribute in ſkins of theſe animals, as I ſhall explain hereafter *.

132 Two phenomena in the heavens were obſerved at the north-weſt, during the nights of the 13 and 14. From the deſcription that was given of them, we judged that they were auroræ boreales, and we lamented that we were not informed time enough to ſee them. The weather had been tolerably fair during our ſtay at the baths; but the weſtern part of the ſky had been almoſt conſtantly charged with very thick clouds. The wind varied from weſt to north-weſt, and gave us now and then a ſhower of ſnow, which did not yet acquire conſiſtency, notwithſtanding the froſts which we experienced every night.

000 Our departure was fixed for the 17 Octo-

* Theſe ſkins are not only a conſiderable branch of commerce, but ſerve as a ſpecies of money with the Kamtſchadales.

ber,

[October, 1787--analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

793 ſalary of eighty roubles, and twenty *pouds* * of rye flour. His pariſhioners of conſequence, pay no tythes; but he receives alms and other caſual emoluments attached to his church. For a marriage, a chriſtening, or a burial, theſe prieſts demand whatever they pleaſe. There is no regulation in this reſpect, and every thing is governed ſolely by their caprice, which occaſions conſiderable impoſitions and abuſes. In general however, they endeavour to proportion their demands to the abilities of their pariſhioners, a diſcretion that is entitled to applauſe.

651 The Kamtſchadales are free. They are
R ſubject only to an annual tribute to Ruſſia,
177 which conſiſts, as I have already ſaid, in
.65 various kinds of furs; ſo that the produce of their chace, turns almoſt entirely to the

* A Ruſſian weight equal to about thirty-three pounds.

advantage

7:Lesseps T-3 (1787-88)1790 Kamchadal

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advantage of the empreſs. Every chief of a family is obliged to furniſh for himſelf and for each of his children, even ſuch as are in their minority, a certain quantity of ſkins equivalent to his ſhare of taxation: this may amount to ſeven roubles more or leſs, and the ſkins, I am told, are generally valued at the loweſt poſſible price. This mode of paying tribute muſt produce a conſiderable revenue to the crown, if we merely judge from the number of ſables the province annually ſupplies, which is ſomething more than four thouſand. The toyon of each oſtrog collects the taxes, and remits them to the treaſurer of the crown; a receipt is previouſly given to every individual of the amount of his tribute, and each Kamtſchadale takes care to mark with his ſeal, or ſome other ſign, all the furs that he delivers.

The current coins are the golden imperial

of

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-1-3
116, 563, 635, 651 Russia
636.63

"In the year 1783 a mandate from her Imperial Majesty proclaimed Neizshni Kamtshatka a city; ordained it the seat of government of the country under the chancery of Ochotsk offered privileges to such merchants as chose to become burghers; and instituted courts of justice, establishments better calculated to govern 300,000 men than 1500, which is about the number of male inhabitants. The governor was denominated Gorodnitshik (mayor); and his establishment consists of a secretary and writers; a Kaznatshestva (exchequer) for the receipt of the revenue, and payment of officers; a Zemskoi Sud (court of the interior), of which the Ispravnik, or captain of the district, is president, and in this court one of the natives is a member to represent the whole body; with a magistracy to regulate mercantile concerns, as already mentioned. [311]

The salaries allowed by government to the different officers are as follow:

The Gorodnitshik	- -	600 rubles.
His Secretary	- -	300
The Kaznatshae	- -	400
Ispravnik	- -	400

other officers less in proportion; some of the writers having only 24 rubles per annum.

27: Sauer--310-312 T-2 (1789-93) 1802 Kamchadal-2
116, 563, 635, 651 Russia
636.63

Prices of Articles 1793	Kazan.	Kamtshatka.
Linen for shirts per arsheen*	18 cop.*	120 cop.

*A pood is 40 lb. Russ, or 36 lb. English. 100 copeaks make a ruble; a copeak may be reckoned little more than a farthing sterling. 9 arsheens make 7 yards.

Boots per pair	-	-	3 rub.	12 to 18 rub.
Thread stockings do.	-	-	125 cop.	4 to 5 rub.
Soap per lb.	-	-	6 cop.	60 to 100 cop.
Candles do.	-	-	8 cop.	80 to 100 cop.
Tea do.	-	-	2 rub.	12 rub.
Sugar	-	-	50 cop.	3 rub.
Leaf tobacco per lib.	-	-	5 cop.	3 rub.
Rye flour, per pood*	-	-	50	500 cop.
Wheat do.	-	-	60	800 cop.
Rice per lib.	-	-	10	100 cop.

From this statement of prices, the impossibility of an officer living upon his salary will plainly appear; he is therefore compelled to find out some method of increasing his income, at the expence of the poor natives.

One of the captains of the district, who came here with his wife and family, finding himself extremely distressed, appropriated [312] the tribute of one year to his own use, and wrote a letter to the Empress; stating, that the severity of the climate, the prices of every article of life, and the wants of his family, had compelled him to make use of the tribute, consisting of such a number of sables and fox skins for their backs and bellies, which he rather chose to do than rob the poor natives (the only alternative). He requested her pardon, and an appointment where he could live upon his salary; and the industry of his family (of no benefit in Kamtshatka) might help to repay the amount of the articles that he had appropriated to his own use. The Empress ordered the governor to give him such an appointment, and pardoned him on account of the good reasons that he assigned; but this pardon was not to be regarded as a precedent; for such mercy was not to be extended to any future person who should dare to act in the same manner.

The magistracy receives its income from the burghers and meshanin. The latter are privileged pedlers (and the colonists are of the number); the former are divided into three classes, according to the extent of the capital that they give in, upon which they pay one per cent."

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-1-2
116, 161, 563, 651 Russia
636.65

"The number of inhabitants may be stated as follows, men, women and children:

At the town (Neizshnoi) - -	548
Ostrog Tigil - -	338
Virchnoi - -	226
Bolshoiretsk - -	235
And at the harbour of St. Peter and St. Paul - -	85
Colonists - - -	255
Russians - - -	1687
Kamtshadals - - -	1053
Total - - -	2740

Of the natives 351 males only pay tribute, or, rather, are living on the list of those who are tributary, according to the revision [307] made during the government of Mr. Reinikin, who succeeded Major Behm. The revisor (in 1784), by some unaccountable mistake, has frequently noted the name of one and the same person as the inhabitant of two or three villages; and from each village the tribute is exacted for this man. They have made repeated remonstrances, but in vain: this imposition, however, is the least

27: Sauer--306-307 T-2 (1789-93) 1802 Kamchadal-2
116, 161, 563, 651 Russia
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of their sufferings. They are compelled to pass the greater part of their time in procuring necessaries for their visitors. The governor makes his annual circuit round the peninsula, and receives a present from every individual; the captain of the district goes his rounds twice; different deputations from the courts of justice, soldiers on furlough, couriers, &c. all travel at the expence of the poor native, who is compelled to keep an extraordinary number of dogs for their conveyance. Government horses are quartered at each village, and the inhabitants must provide a stock of hay for them. Thus the Kamtshadal scarcely finds time to collect a supply of food in the fishing season for his own family."

27: Sauer--307-308 T-2 (1789-93) 1802 Kamchadal
116, 164, 177, 622, 651 Russia
636.65

"In 1768 the small-pox carried off 5368 of the inhabitants; and since the departure of Major Behm, the court of the interior (Zemskoi Suc) has discovered, that the Kamtshadals are indebted to government the whole tribute for the unfortunate sufferers by that disorder, and lay claims at present for the debt. The natives produce receipts; but are told, that an ukase from Irkutsk claims the payment. They appointed a delegate to lay their grievances at the feet of their sovereign; he, however, only reached Irkutsk, when he was promised redress, and sent back again: he returned last year, and is the chief of Shapinski village, a very intelligent man, and, I thought, very likely to help me to [308] some information as to their former customs and religion, which are now quite abolished; nor is their language pure."

27: Sauer--309-310 T-2 (1789-93) 1802 Kamchadal
116, 177, 273, 439, 651 Russia
636.65

"They have long since adopted the manners of the Russians, and profess the Greek religion. Of their former customs there only exist their lascivious dances, and their impure language, with part of the dress. They entertain the greatest veneration for the memory of Major Behm, under whose command they enjoyed the protection of a father. At that time Kamtshatka was governed merely by the major and his assistant, Captain Shmaleff, without any other court of justice. The revenue of this peninsula was then 40,000 rubles annually, arising from the tribute of the natives, the profits on brandy, and the duty on furs; which sum was remitted to the chancery of Ochotsk: a trading expedition in two or more open boats was yearly undertaken by the natives, accompanied by the priest of the peninsula, to the Kuril islands; from whence they obtained sea-otter skins of a superior [310] quality, several Japanese articles, and wrought silks. The merchants who visited the peninsula brought other necessaries, and hard money for the articles of the natives. Brandy not being considered as an article of trade, but a government concern, the sale was prohibited; and, the commander or his assistant inspecting the transactions of the merchants, prevented fraudulent proceedings on both sides."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

133 feet above the level of the sea. It has frequently emitted flames, lava, and dust, but its summit was not visible during my stay in this respectable village of Christians. After the grand eruption which I had witnessed in the Island of St. Vincent's, in 1812, I could feel no regret at not being able to see one in Kamtchatka. It is true that little or no mischief arises from the volcanoes of this Peninsula, and they may therefore be more innocently and placidly seen and contemplated.

651 The amount of tribute paid by the peasants is
563 about ten shillings, formerly it was twenty; being
R reduced one half at the time the Kamtchatdale ya-
177 sack was reduced from two to one sable. The
.65 country is in every respect most luxuriant and beautiful, and were there a sufficiency of inhabitants, as well as of horned cattle, it would no doubt make one of the most desirable abodes in the world.
563 Wood of the first growth, fish in a most abundant
361 quantity, game of the finest flavour, and of various species, pastures inconsumable; a chase which yields foxes, sables, river-otters, bears, wolves, &c. of the finest specimens, are what Cliuchie has to boast. Vegetables are raised with greater facility than in any other part of the peninsula. Wild berries are very abundant, and some little rye flour is produced, though not of so ripe a quality as to be of much use; such are, in short, the claims of Cliuchie, that it should undoubtedly be made the capital of the peninsula, and I am only astonished

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 R 177 .23

ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65

The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 758 R 177 .75

The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2(1821-22)1824 Kamchadal

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generation that the stock itself can be preserved, which will not long be possible, if spirit continue to be transported and retailed out as it now is.—While making these reflections in England, I am aware that the Russian Government have desisted from this trade, but this is only the worse for the Kamtchatdales, inasmuch as the pedlers take an extra quantity, and demand a most exorbitant price for a spirit infinitely inferior.

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The abuses arising from the collection of the yasack are most cruel. The yasack itself is inconsiderable, but from the arbitrary manner in which it is collected, it is rendered odious and oppressive. The tribute is levied in kind at any low or capricious valuation, and it has not unfrequently happened that the Toion of a village, who does not properly compliment the Chief or other officer, upon the annual visit, has so small a price put upon his furs, in payment of their tribute, that they sustain a loss of two, three, and even four hundred per cent. I have seen sables valued at half-a-crown for which the merchants present would have given twelve shillings. Independent of the yasack, each Kamtchatdale has to pay seventy copecs, or seven pence, as a sort of capitation or poll-tax, upon failure of which the Ispravnick may have recourse to the most arbitrary and unjust measures. Any property may be seized and sold on the moment, such as axes, knives, nets, guns, kettles, or the clothing of the family; and it has often happened that a

29:Cochrane T-2 (1821-22)1824 Kamchadal

651 661 R 177 .65

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The next galling tax is that levied for the tax-gatherer himself, and this is a greater grievance than that levied on behalf of the Emperor, and under more humiliating circumstances. Each os-

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Nor is the impolitic system of collecting the tribute more injurious than that arising from forced or gratuitous services, such as the forwarding of the post, the transport of flour and salt, and the issuing of padvodies, or forced levies of horses or dogs, to officers and favourites. This is indeed an intolerable abuse, and calls loudly for redress. There can be no doubt but that if the proprietors of dogs were rewarded at a proper time and in a proper manner, they would as much court the employment as they now abhor it. According to the present plan the natives lose their time, their dogs, their health, and their provisions. Any favourite or officer who may wish to trade is furnished with one of these free billets, which authorizes him, upon the plea of public duty, to call out men and dogs. While the manner of the officer or favourite seems to intimate, that he confers an obligation upon the Chief of the village by his acceptance of a couple of sables as a present. Nor is this all: not content with the present, the party travelling has the privilege of trading, and buying just as many more sables as the poor aboriginal may have caught, and which are invariably sold for just such a consideration as the officer may incline to give.

If a governor or officer be compelled to travel upon public service, and receive from the Crown a

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sum of money to pay travelling expenses, it seems very strange that such money is not paid to these poor people. As little can I understand why a post should travel gratis: surely the poorest and most distant part of the Russian empire, should not be oppressed in such a manner. It is true, the sum paid by the government to officers when travelling is small, as well as that paid to the postillion when in charge of the post; but small as it is in itself, it would be acceptable to those to whom it would appear much. As to officers' travelling, for which there is no public necessity, they can at best but reap the advantages belonging to the fair trader, who is not inconsiderably taxed. I have heard an officer of high rank assert, that every voyage from Kamtchatka to Okotsk and back again, was worth ten thousand roubles, or five hundred pounds; and I believe he spoke the truth.

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With respect to the pedlers, here denominated merchants, they in truth ought to be taxed severely, as well in regard to the goods they bring as the price at which they are sold, the articles being such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future

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necessities. The quantity of articles hawked about by the merchants consists of tobacco, spirits, silks, tea, sugar, nankeen, and cotton handkerchiefs. Every Kamtchatdale keeps open house, and upon the arrival of a Russian his door is held open, the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single man pays a heavy tax, a married man a heavier, and a father the heaviest of all. Such conduct is bad policy on the part of government, and carries with it more the appearance of a wish to extinguish than to increase the population of Siberia.

437 I have already commented upon the evil effects
563 arising from forced levies, and forced services; of
661 the transport of flour, salt, spirits, the post, as well
R as officers from one place to another without any
177 remuneration to the inhabitants. Of the conduct of
.66 these travelling gentlemen, high and low, it will be sufficient to give a specimen. The officer, upon arriving at a village, is received by the Toion or

29:Cochrane T-2 (1821-22)1824 Kamchadal

631 money as possible. The very shortest term of a
R chief's command at Kamtchatka should be ten
177 years: let him then only be liberally paid, and I
.63 will venture to say, that many suitable characters
will be found, who will prefer to administer justice
with clemency and honor, to the degrading of
their characters by a mean and derogatory traffic.
If an increase of rank, double pay and provisions,
an extra pension, and the most unlimited powers
are not sufficient to ensure a just discharge of the
duties, what besides conscience ever can induce it?

136 Of the Kurile Islands, though they are not now
161 in the government of Kamtchatka, having been
651 ceded by the Emperor in property to the American
R Company, I shall make but a very few remarks,
177 and with them close my observations on Kamt-
.65 chatka.

This chain of islands is divided between the Russian and Japanese empires; of those belonging to the former empire, but few are inhabited. The first Kurile, situate at sixty-five miles from Cape Lopatka, has three yourtes, with four males and eight females, nominally paying as tribute six sea-otters and twelve roubles in money; but, as no sea-otters are found, and the islands abound in foxes, seven of these are received in lieu of them. There is in the island a tolerable road-stead for small craft on the NW side. Immense quan-
237 tities of waterfowl, as ducks, geese, and swans,
291 frequent the place; and from the skins and feathers

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the inhabitants make their parkas and all their warm clothing, which are also exceedingly comfortable and beautiful. The climate of the islands resembles that of St. Peter and St. Paul's. The soil is generally good, producing fine pastures. On the first isle there was formerly an abundance of cattle, but now only two cows remain.

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The second island, about ninety miles from the first, has seven yourtes, with thirty-five males and forty-two females, paying tribute for itself and the fourteenth isle, nominally, thirty-five sea-otters; that is, twenty-three foxes and one hundred and fifty roubles. The fourteenth isle has three yourtes, fifteen males, and seventeen females. Of the intermediate islands, and those beyond the fourteenth, I could obtain but very little information; the whole are evidently volcanic productions, and are supposed to have been separated by some violent convulsion of nature from the peninsula of Kamtchatka. The islands, which are lofty and bold, are said to be without rivers, nor are there any harbours known. It is to be remembered, however, that they have been but very imperfectly surveyed. The inhabitants are supposed to be of the same origin as those of Kamtchatka, though they differ in the custom of wearing long beards, which was probably introduced among them by the Russians. Their dialect is the same with that of the inhabitants near Cape Lopatka; from whence baidares are frequently sent to the first and second isle, to bring the tribute and furs. [the Kurils--Analyst]

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Ko 141 On the whole the coastal Koryak type holds an intermediate position between the Kamchatka and the Eskimo types.

144 [6] The Itelmen, who have preserved their language, are anthropologically still mixed up with the Russians. This is
Ka 144 corroborated both by the data of the interviews and by the similarity of all their traits to the white-haired Europeoid race. These traits include pigmentation, stiffness of the hair, the structure of the cheekbones, the profile of the upper lip, etc. It follows therefore that the deviation of the Itelmen from the "Mongoloid standard" in the form of their nose, in the structure of their eyelids, and in the development of their beard, as well as the similarity of these Itelmen traits to those of the Eskimo must be regarded not as proof of a direct relationship of the two groups but as a result of the mixture of the Russians with the Itelmen. The ancient Itelmen type was indubitably characterized by a greater frequency of the epicanthus than among the Eskimo and by a less sharply defined nose. On the whole, they were probably related to the coastal Koryak, and thus they also held an intermediate position between the characteristic representatives of the Eskimo and the Kamchatka types.

The Russianized Itelmen (in the future I shall call them by their conventional term "Kamchadal") are not easily distinguished from the descendants of the ancient Russian inhabit-
Ka ants of Kamchatka. In the official documents only the 1897
● 659 census made a clear-cut demarcation between the two groups,
101 [the Kamchadal, and the Russianized descendants of the Itel-
565 men--Analyst] and such a demarcation was facilitated at the time it was done by the difference in social rank (sosloviye) of the members of the two groups. Yet even then this was an isolated and purely formal difference. The 1926 census reflects in this respect an unbridled arbitrariness of the census takers. The inhabitants of the ancient Upper Kamchatka and Lower Kamchatka forts are referred to in the census as Kamchadal, while the Russianized descendants of the Itelmen from the villages of Kikhchik, Kolpakovo, Krutogorovo, Oblukovina, etc. are referred to as Russians.

Ka The contemporary official records are fully justified in not
101 giving recognition to the term "Kamchadal" and in regarding all the Russian-speaking people of Kamchatka as Russians. However, this term has not become obsolete in everyday conversation, and is employed by the natives as well as by the new immigrants not only with reference to the Russianized Itelmen but also to the descendants of the ancient Russian

and ſometimes they played 'till both parties had pawned their cloaths for brandy. Such way of living, one may eaſily believe, was attended with great confuſion; but what the poor ſlaves ſuffered is almoſt incredible, being obliged ſometimes to change their maſters twenty times a day. 563 567

The invention of making ſpirits happened accidentally. The Coſſacks, after the manner of the natives, made a great proviſion of all kinds of berries for the winter. It happened ſometimes that they began to ferment in the ſpring, and could be uſed no other way than in drink. This drink was obſerved to cauſe drunkenneſs when taken in great quantities; upon which they began to diſtil it, and, to their great ſurpriſe and pleaſure, found that it produced a good ſpirit. They have ſince diſcovered that they could make brandy from an infuſion of the ſweet graſs, and now they have ſpirits in plenty. Their method of preparing this herb for diſtillery we have already explained. 563

Thoſe that are curious to know whence the Coſſacks ſettled here obtained their riches, muſt be informed that they owe them to the following circumſtances: firſt, when they conquered the natives they made all the plunder they could: ſecondly, every party of Coſſacks, that was employed in gathering the taxes, obliged each tributary native, beſides the crown tax, to give them four fox-ſkins and one ſable, which they divided among themſelves: thirdly, by their commerce with the natives, whom they obliged to pay a very high price for every trifle they furniſhed them with. Although, at preſent, the Coſſacks are forbidden to take any thing more than the crown tax, yet they are ſtill allowed to ſet what price they pleaſe upon their goods; and indeed they ſell them, or change them for furrs, at very great profits, and ſometimes for proviſions, nets, and boats. Without this they would not be able to live upon their ſmall pay, which is no more than what they uſed to receive at *Jakutſki*, and, both in money and proviſions, does not amount to above 14 563 661 651 439 R. 177 65 563

rubles

29:Cochrane T-2 (1821-22) 1824 Kamchadal

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661 With respect to the pedlers, here denominated
183 merchants, they in truth ought to be taxed severe-
435 ly, as well in regard to the goods they bring as
441 the price at which they are sold, the articles being
563 such as are of light burthen, or will return the greatest profit. The ignorance of the aborigines is such, and their thoughtlessness of the future so great, that they prefer present luxuries to future
661 necessities. The quantity of articles hawked about
437 by the merchants consists of tobacco, spirits, silks,
439 tea, sugar, nankeen, and cotton handkerchiefs.
441 Every Kamtchatdale keeps open house, and upon
563 the arrival of a Russian his door is held open, the

29:Cochrane T-2 (1821-22) 1824 Kamchadal

661 owner standing by it uncovered, and awaiting the
437 entry of his noble guest, who, making an obeisance
439 to the kasaika or landlady, passes on to the most
441 comfortable part of the dwelling, and divesting
563 himself of the unwieldy clothing so necessary in this part of the world, calls for dinner or supper as the time may be, orders food for his dogs, eats and drinks well, has a bed prepared for him, and takes breakfast, consisting of fine game, fish, and the like. The intermediate time is employed in extorting three or four hundred per cent. profit for his goods, and the only remuneration to his host is a glass of spirits or a leaf of tobacco, in some cases not even a "thank ye," although stress of weather has, unfortunately for them, detained him to partake of their hospitality for a week or more.

Were the merchants compelled to take more woollens and linens, some flour or oatmeal, with a sufficient quantity of axes, knives, kettles, twine, nets, and other implements of great necessity, there would be less objection to their proceeding round the Peninsula, and less inducement for officers to do so. Tobacco, it is true, is an article of great demand as well as of great necessity; tea and sugar are also in considerable demand, though, probably, too much money is lavished upon both these articles, by the Kamtchatdales; as also upon silks, nankeens, and fine cottons. A great benefit would arise from the establishment of a general fair in Kamtchatka, to be held at St. Peter and St. Paul's, as well as from two or three provincial fairs to be held upon a certain day at certain places.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

29:Cochrane T-2(1821-22)1824 Kamchadal

000 each family of the aborigines be compelled to take from the government one pood of flour per month, at the price, say, of a sable or fox skin. The result would be, that government would issue an extra six thousand poods of flour at an expense of sixty thousand roubles, in return for which they would receive six thousand skins, worth at least ninety thousand roubles; leaving a gross profit of four times the price of the present yasack, and actually assisting the Kamtchatdales by the abandonment of a direct tax of half the amount—to say nothing of the benefits which would accrue from such a measure to the females and children who are now left for many days without tasting any other food than bad fish
651 or the bark of trees. I do not know what effect a
R poll-tax may have upon the animal frame, but it
177 appears to be no incitement to procreation. In
.65 Kamtchatka it is the same as in Mexico; a single man pays a heavy tax, a married man a heavier, and a father the heaviest of all. Such conduct is bad policy on the part of government, and carries with it more the appearance of a wish to extinguish than to increase the population of Siberia.

437 I have already commented upon the evil effects
563 arising from forced levies, and forced services; of
661 the transport of flour, salt, spirits, the post, as well
R as officers from one place to another without any
177 remuneration to the inhabitants. Of the conduct of
.66 these travelling gentlemen, high and low, it will be sufficient to give a specimen. The officer, upon arriving at a village, is received by the Toion or

29:Cochrane T-2 (1821-22) 1824 Kamchadal

437 Chief, and conducted to the warmest and cleanest
563 part of the yourte. His upper garments are taken
374 from him, cleared of the snow and put out in the
661 open air for the night; it being understood that
R the colder the dress is put on in a cold country,
177 the warmer it ultimately becomes. The landlady, or
.66 Toionsha, is also engaged in scraping the boots of the travellers, to prevent the heat of the room from melting the snow which adheres to them. The best provisions are then got ready as fast as possible, either for dinner or supper, as the time may suit. The Toion then comes in with a reluctant smile and a pair of handsome sables, and bowing to the officer, places them upon the table for his acceptance. Dinner being at length served up, the officer may be considerate enough to give the Toion a glass of spirits, as also to permit the family to partake of the tea-leavings. Having finished his dinner, the officer asks the Toion if the chase has been good, and how many sables he has got, probably two, four or six, which he accordingly takes for as many handkerchiefs, pieces of nankeen, pounds of tobacco, or a small quantity of tea and sugar. The dogs of the village are at last ordered out and the officer departs, in perfect complacency with his conduct and condescending demeanour.

000 I have never been able to ascertain the exact number of animals annually caught in the peninsula, but suppose they cannot fall short of thirty thousand, worth at least two hundred thousand roubles. One

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

669 For information on the Kamchadal's strategems in rebellions against the Russians see 726 or 177.72.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and
R. the other in the year 1713 upon the river *Awatſcha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

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l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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In the ſummer of the year 1729, a *Japaneſe* veſſel was wrecked upon the coaſt of *Kamtſchatka*: there were ſeventeen men on board, all of whom, except two, were murdered by Lieutenant *Stimicof*, who happened to be there at that time. The two ſurvivors were ſent to *Peterſbourg*, where they had the ſatisfaction of ſeeing the murderer of their countrymen publickly executed. In 1730 *John Novogorodof*, and in 1731 *Meyer Shedfordin*, were tax-gatherers in *Kamtſchatka*. We only mention them as being the occaſion of the great rebellion, which we are now to deſcribe.

CHAP. IV.

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Of the REBELLION *of* Kamtſchatka, *the Burning of the Lower Fort, the Subjection of the Rebels, and their Puniſhment.*

THE natives had reſolved for a great while to deſtroy all the *Ruſſians* who were in *Kamtſchatka*; but ſince the diſcovery of the paſſage over the *Penſchinſka* ſea, and the arrival of veſſels with new people, it appeared to them too dangerous: but when Captain *Bering* with his fleet ſailed on the expedition of *Kamtſchatka*, and moſt of the Coſſacks who were ſettled in *Kamtſchatka* were ordered to join Captain *Paulutskoy* at *Anadir*, to ſuppreſs the rebellious *Tchukotskoi*, very few Coſſacks were left in *Kamtſchatka*. This the natives looked upon to be the wiſhed-for opportunity; and during the whole winter the *Niſhnaſhaltalski*, *Klutcheſski*, and *Yaloſski Kamtſchadales*, under pretence of viſiting one another, travelled through all *Kamtſchatka*, and inſtigated the other inhabitants to join in their deſigns, under

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

under pain of being intirely destroyed. By these means all *Kamtschatka* entered into a state of open rebellion; and hearing that *Shesticof* was killed by the *Tchukotskoi*, they reported that these people were marching against *Kamtschatka*, with a view either to have a pretence for collecting themselves together, or that the *Russian* Cossacks, out of fear of these people, might desire the *Kamtschadales* to guard them. Their measures were so well concerted, that it was a singular instance of Providence that any of the *Russians* were preserved; for if they had once been driven intirely out of the country, it would have been difficult for them to have re-established themselves. The counsels of the *Kamtschadales* were far from being such as one would expect from savages; they endeavoured to prevent any correspondence with *Anadirsk*, and kept a strong guard upon the sea-coasts, where they might seize upon any of the *Russians* that arrived. The chief authors of this rebellion were one *Yalofski Toyon*, or chieftain called *Fetka Harchin*, who had frequently served the *Russians* as an interpreter, and a chieftain of the *Klutchefski*, called *Chugotche*.

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While this conspiracy was in agitation, the commissary *Skacurdin* was on his departure from *Kamtschatka*, with a considerable party to guard the tribute. They had sailed from the mouth of the river *Kamtschatka* towards *Anadir*, but soon after contrary winds obliged them to return. The *Kamtschadales*, informed of their departure, and ready for the revolt, gathered together, and sailing up the river *Kamtschatka* killed every *Russian* Cossack they could find, burned their summer huts, and carried off their wives and children into slavery. Their chief strength was directed against the fort; where arriving in the night, they set fire to the priests house, concluding that the fire would bring out all the inhabitants. In this they succeeded too well, murdering almost every person, without sparing either sex or age. They burned all the houses, except the fortifications and church, where the goods both of the pub-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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lick and private people were kept. Those who escaped this massacre fled to the mouth of the river, and carried the news to their countrymen, who had not yet left the coast. When the *Klutchefski* chief, *Chugotche*, heard of the taking the lower *Kamtschatka* fort he marched thither, killing or taking prisoners all the *Russians* he met with; and joining *Harchin*, he informed him that the *Russian* vessels were yet upon the coast, for which reason he judged it proper to strengthen themselves in the fort; and sending accounts of their success to all their countrymen, ordered them to join him. The next day they divided all the plunder, and dressed themselves in the *Russian* habits; and some of them, putting on the priest's robes, celebrated their own religious ceremonies and conjurations. *Harchin* ordered a new-baptised *Kamtschadale*, who had learned to read *Russ*, to say mass in the *Russian* manner, and dressed in the priest's robes; for which he made him a present of 30 red fox-skins.

The 3d day after the taking of the fort arrived a *Russian* skipper, *Yacob Hens*, with 60 Cossacks, who was sent with a design to recover the fort from the rebels. He endeavoured by all methods to persuade them to return to their duty, assuring them of a general pardon; but they would not give ear to him: nay, *Harchin*, their chief, told him that he had no business there, and that he was commissary of *Kamtschatka*, and would himself gather the taxes, so that they did not want any Cossacks among them. Upon which *Hens* sent to his vessels for some cannon, and began on the 26th of *July* to fire upon the fort, where he made a very large breach, which caused great confusion amongst the besieged, and gave an opportunity for the women that were prisoners to escape. *Harchin*, finding it impossible to defend the fort, made his escape disguised in women's cloaths; and although he

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

was purſued by ſeveral, yet he made ſuch expedition that they could not overtake him. After this 30 of the beſieged who remained ſurrendered themſelves; but a *Klutchefski* chieftain, *Chugotche*, with a few people that joined him, held out to the laſt man. During their defence the powder magazine was ſet on fire, which reduced the fort and all the riches in it to aſhes. In this ſiege the Coſſacks had four men killed, and a great many wounded. How many of the *Kamtſchadales* were killed was not known, their bodies being conſumed in the fire; not one eſcaped alive, for thoſe who ſurrendered were killed by the Coſſacks, in revenge for the loſs of their wives and children.

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The ſudden return of the *Ruſſian* party was the occaſion that this revolt was ſo eaſily quelled; for it prevented their aſſembling in ſuch numbers, as they otherwiſe would have done. However, it was not yet intirely over, for *Harchin*, with ſome other chieftains, collected a good number of people together, and reſolved to march to the ſea ſide, and attack the *Ruſſian* veſſels which were there. But, in the very beginning of his march, he was met by a party of *Ruſſians*, which obliged him to fortify himſelf upon the left ſide of the river *Kluchefka*; the Coſſacks encamping upon the right, ſeveral ſkirmiſhes enſued between them. When *Harchin* ſaw that he could not accompliſh his deſign, he propoſed to treat with the Coſſacks, and offered to come to their camp, if they would ſend one Coſſack as an hoſtage for him; which they granted. He demanded, That they ſhould not intirely ruin the *Kamtſchadales*, and promiſed that for the future they would all live peaceably, only deſiring that they would allow him to go and prevail upon his friends and relations to conſent to this agreement; which being granted, he ſent word, that he could not prevail with them to make peace; and that even his own brother, and a chieftain, *Javatche*, who had accompanied them, had refuſed to return.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

175 The next day *Harchin* came to the bank of the river with some
669 other chiefs, and desired, that the Cossacks would send a
R. boat to bring him over, and give him two Cossacks in hostage;
177 which they agreed to: but no sooner was he come over
.17 than they made him prisoner, and ordered the hostages to throw themselves into the river, and swim over, while they fired upon the *Kamtschadales* on the opposite bank, who, when their chief was made prisoner, presently separated; but, being pursued by different parties, most of them were destroyed. The chieftain *Tegbil*, having defended himself a great while, at last murdered his wife and children, and killed himself; the chieftain *Chugotche*, in vain solliciting the inhabitants upon the river *Koseretsha Shapina* to join him, was in the end murdered by them. After this rebellion, which appeared at first very dangerous, and threatened the intire destruction of the Cossacks, was quieted by the arrival of succours, things continued in pretty good order at *Kamtschatka* until the year 1740, when the *Russians* had seven people killed by the natives.

When this rebellion was over, orders were sent as soon as possible to Major *Merlin*, with another officer and some regulars, together with Major *Paulutskoy*, to inquire into the cause of this rebellion, and the murder of the *Japanese*, and to send the report thereof to *Jakutski*; he was at the same time to build a new fort, which he did a little lower than the mouth of the river *Ratuga*: this was called the lower fort of *Kamtschatka*. Having examined into the cause of the rebellion, three of the *Russians* were found guilty of death and executed; and two of the chief rebels, with some others, both Cossacks and *Kamtschadales*, were punished. All the natives, whom they had either taken prisoners, or had made slaves of, were restored to their liberty. Those *Kamtschadales* who were put to death, seemed to go to execution without the least concern, and under the torture they were scarcely heard to moan; nor could they force them to confess any thing more than what they had done sess voluntarily before.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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St. Petersburg and were presented to the Empress Anna Ioanovna. In the same year they were baptized; Gonza was named Damian Pomortzev, and Soza, Kosma Shultz. They were charged to teach Japanese to the students of the Academy of Sciences. Neither lived long—Soza died in 1736 at the age of 43 and Gonza in 1739, being only 21.

Some years later (1745) other Japanese wrecked at Kamchatka's shore were brought to St. Petersburg for the same purpose, but the Japanese were simple fishers and hardly could be used as teachers.[1] Such wreckages of Japanese ships repeatedly took place about that time. The explorer Lesseps mentions nine Japanese whose ships were wrecked at the Aleutian Islands in 1788 and whom he brought to Kamchatka.[2]

THE UPRISING OF THE KAMCHADAL

THE CAUSES OF REVOLTS

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The causes of revolts of the Kamchadal were the cruelty, violence, greediness with reference to fur-skins, and the licentiousness of the Cossack chiefs and soldiers on the peninsula. On the other hand frequent mutinies of Cossacks against their chiefs and the incessant feuds between the chiefs and their parties could not inspire respect from the oppressed natives. Numerous local revolts had taken place from the very beginning of the occupation of the country by the Cossacks. Rebels and victors were equally merciless in their encounters. A general uprising of the Kamchadal which had been fomenting for a long time broke out in 1731. The Kamchadal were ready to rise before that date but did not dare to do so.

In 1729 Kamchatka was visited by the first scientific expedition of Bering and his companions who had armed crews. The ship *Gabriel*, with a crew of one hundred men belonging to the military expedition of the Cossack chief, Afanassy Shestakoff, remained in Nishne-Kamchatsk until July 1731. According to the original plan of Shestakoff's military expedition, the *Gabriel*, after leaving Okhotsk, was to visit Kamchatka and to proceed from there to the mouth of the Alutor River, where the commander of the expedition, Shestakoff, expected to arrive by land from the shore of the Okhotsk Sea, in order to subdue the Alutor Koryak; from there it was intended that the ship should sail to the mouth of the Anadyr River, exploring the shores on the way, and continue up the river to the fortification at Anadyrsk, which Shestakoff intended to reach by land. But Shestakoff's party was defeated and he himself killed by the Koryak after he had crossed the Paren River. When the news of Shestakoff's death arrived, the *Gabriel* remained in Kamchatka, awaiting further orders. In June 1731 she was ordered to proceed to the Anadyr and to enter the service of Pavlutsky, Shestakoff's lieutenant.

As soon as the *Gabriel* had weighed anchor and gained the open sea, the Kamchadal attacked the fortress Nishne-Kamchatsk and took possession of it. Presently a detachment was despatched to take Verkhne-Kamchatsk and Bol-

[1] W. W. Barthold, *Die geographische und historische Erforschung der Ostasiens mit besonderer Berücksichtigung der Russischen Arbeiten*, Leipzig, 1913, p. 130.
[2] M. de Lesseps, *Travels in Kamchatka*, English Translation from French, vol. 1, London, p. 206.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not
● 669 being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula.
R. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were
177.66 successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

157 The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by
761 any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

651 In the winter of 1712 the Chief Antziyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropav-
669 lovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts
R. with secretly lifting doors.[1] The Russians were met with simulated pleasure.
177.65 Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

669 Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a
761 tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and now as storehouses.

S: Jochelson A-5 (1910-11) 1928 Kamchadal

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was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

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The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

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The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed, issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 287.

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

The central figure of Itel'men mythology was the raven-creator, Kutkh.
[193] But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

In the middle of the 18th century, the Itel'mens were converted to
[199] Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist government and raids on the tax treasury. Large uprisings broke out in 1706,
669 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

The quelling of rebellions by armed force and the arbitrary rule of the
[161] local officials reduced the Itel'men population. But the principal reason
[731] for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half
648 of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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merce, and their decisions are either confirmed or annulled by the court to which they are carried by appeal. The Russian code of laws is the only one that is attended to; it is too well known to require that I should enter into particulars; and I could only repeat what has been already related by various historians and travellers better informed upon the subject than myself.

I ought however to add, that the property of the Kamtschadales devolves, of course, upon their decease, to the next heir, or to whomsoever it is bequeathed. The will of the testator is equally respected, and as literally adhered to, as it could be with those nations of Europe who are most scrupulous on the subject of successions.

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Divorces are neither practised or allowed among the Kamtschadales. The Russians seem to court their alliance, though it procures

7th. Sea calves' puppying time. 805

8th. Time when the tame deer bring forth their young.

9th. When the wild deer bring forth.

10th. Beginning of the fishery.

Their division of time is pretty singular; they commonly divide our year into two, so that winter is one year, and summer another: the summer year begins in *May*, and the winter in *November*.

They do not distinguish the days by any particular appellation, nor form them into weeks or months, nor yet know how many days are in the month or year. They mark their epochs by some remarkable thing or other, such as the arrival of the *Russians*, the great rebellion, or the first expedition to *Kamtschatka*. They have no writings, nor hieroglyphick figures, to preserve the memory of any thing; so that all their knowledge depends upon tradition, which soon becomes uncertain and fabulous in regard to what is long past. 212

They are ignorant of the causes of eclipses, but when they happen, they carry fire out of their huts, and pray the luminary eclipsed to shine as formerly. They know only three constellations; the Great Bear, the Pleiades, and the three stars in Orion; and give names only to the principal winds. 821

Their laws in general tend to give satisfaction to the injured person. If any one kills another, he is to be killed by the relations of the person slain. They burn the hands of people who have been frequently caught in theft, but for the first offence the thief must restore what he hath stolen, and live alone in solitude, without expecting any assistance from others. They think they can punish an undiscovered theft by burning the sinews of the stone-buck in a publick meeting with great ceremonies of conjuration, believing that as these sinews are contracted by the fire so the thief will have all his limbs contracted. 681 754

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7:Lesseps T-3 (1787-88)1790 Kamchadal

586 R 177 .58

cures them no particular priviledge. Their motive is obvious. By frequent marriages, it is poſſible that before the end of the preſent generation, the race of the indigenes may be totally extinct.

681 R 177 .68

The penalty of death, aboliſhed in all the dominions of the empreſs, is never inflicted in Kamtſchatka. In their earlieſt migrations, the Ruſſians, when accuſed of haraſſing the natives, were condemned to the knowt; the Kamtſchadales alſo, for various offences, were liable to this cruel puniſhment; but it is no longer practiced. When the natives are guilty either of petty or capital offences, the puniſhment is whipping. It may be queſtioned whether they have gained by the change. The preſent mode of puniſhing them being more ſimple and expeditious, it is reſorted to with leſs ſcruple, and is liable to frequent abuſe.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal-

fess any thing more than what they had done voluntarily before. 651

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity. 692 797 R. 177 .65

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.* 361 R. 177 .71

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Tegbil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

7:Lesseps T-3 (1787-88)1790 Kamchadal

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among thefe people the manners and cuftoms of Ruffia. This important office was confided, in 1784, to baron de Steinheil, who fixed his refidence at Nijenei. Affairs calling him elfewhere, he was fucceeded by M. Schmaleff, who, in accompanying us, was making the tour of his office.

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The government is not purely military; there are fome tribunals eftablifhed for hearing and deciding caufes and other matters juridically. Such are the tribunals of Tiguil, Ingiga, and Nijenei-Kamtfchatka; they are fubject to the jurifdiction of the court of Okotfk, in the fame manner as in Ruffia the magiftrates of the fubordinate towns hold from thofe of the capital, in whom the final decifion refts. There is befide at Bolcheretfk a kind of confular jurifdiction, or vocal tribunal, called in Ruffia *Slovefnoifoud.* The judges are merchants; they take cognizance of all difputes relating to commerce,

7:Lesseps T-3 (1787-88)1790 Kamchadal

692/671 428 R 177 .67 merce, and their decisions are either confirmed or annulled by the court to which they are carried by appeal. The Russian code of laws is the only one that is attended to; it is too well known to require that I should enter into particulars; and I could only repeat what has been already related by various historians and travellers better informed upon the subject than myself.

I ought however to add, that the property of the Kamtschadales devolves, of course, upon their decease, to the next heir, or to whomsoever it is bequeathed. The will of the testator is equally respected, and as literally adhered to, as it could be with those nations of Europe who are most scrupulous on the subject of successions.

586 R 177 .58 Divorces are neither practised or allowed among the Kamtschadales. The Russians seem to court their alliance, though it procures

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 over the remembrance of all the pleasures of the day.

The next day I was invited to the house of the protapope, uncle to the bride, where the entertainment was similar to that of the
177 preceding one, except the fire-work. I have
793 already observed, that the protapope is chief of all the churches in Kamtschatka. The clergy throughout the peninsula are subordinate to him, and he has the decision of all ecclesiastical affairs. His residence is at Nijenei. He is an old man, not entirely deprived of his vigour, with a long white beard which flows down upon his breast and gives him a truly venerable appearance. His conversation is sensible, sprightly, and calculated to gain him the respect and affection of the people.

177 There are two tribunals at Nijenei, one
692 that concerns the governments, and the other takes

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 takes cognizance of all mercantile disputes.
692 The magistrate who presides in the latter, is a kind of burgomaster, subject to the orders of the *gorodnitch*, or governor of the town. We have already seen that each of these jurisdictions holds from the tribunal of Okotsk, to the governor of which it is accountable for all its proceedings.

563 But what most interested me at Nijenei, and what I cannot pass over in silence, was my finding there nine Japanese, who had been brought thither in the preceding summer, from the Aleutienne islands, by a Russian vessel employed in the trade of otter skins.

One of the Japanese informed me, that he and his companions had embarked in a ship of their own country, with an intention of visiting the more southern Kurilles islands, for the purpose of trading with

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29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

724 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

103 *The Coast* extends from the *Bolscheretskoi* or Great River to the *Tegbil.*

Awatscha extends from the *Bolscheretskoi* to fort *Awatscha.*

Bobrovoi or *Beaver Sea* is the district round *Kamtschatka.*

Koreka, from the *Koreki* that inhabit it, extends from the north of the *Kamtschatka* to the *Tegbil.*

Ukoi is the eastern coast from the river *Ukoi.*

Tegbil is the western coast from the river *Tegbil.*

133 *Kamtschatka* is plentifully furnished with rivers; however they
361 are so little that none of them are navigable by the smallest vessels,
563 except the river *Kamtschatka*, which will carry small vessels 200 versts upwards from its mouth. Into this river it is reported that some *Russians* were brought by sea, long before its subjection to *Russia.* It is at present called *Theodotoshine*, from the chief of those people thrown a-shore, whose name was *Theodot.* Next to this, the most considerable rivers are, the *Bolschaia-reka*, or Great River, *Awatscha* and *Tegbil*; upon which the *Russians* have set-
133 tlements. *Kamtschatka* is likewise very well furnished with lakes, particularly about the river of that name, where they are so numerous that there is no passage over land in the summer-time. Some of them are very large: the most considerable are, the lake of *Nerpitche*, which is near the mouth of the *Kamtschatka*; the *Kronotzkoy*, out of which runs the river *Krodakighe*; and the *Kurilskoy*, out of which runs the river *Osernoi.*

133 The river *Kamtschatka* rises in a marshy ground, and first runs
712 north-east; then inclines more to the east, and turning at once
R towards the south-west, falls into the ocean in 56° 30′ north
177 latitude. From its source to its mouth, in a strait line, is 496
.71 versts; but the length of its course, according to the exactest computation, is about 525 versts; during which it receives into it many brooks and rivers. About two versts from its mouth, upon the right side, are three deep bays. There are several forts built along the banks of this river by the *Russian* Cossacks, to

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awe and keep in subjection the wild inhabitants. The *Elouki* may be reckoned the chief of all the rivers that fall into the *Kamtschatka* on the left side, and its head meets that of the *Tegbil*.

The *Tegbil* runs almost in the same latitude with the *Kamtschatka*; and the strait road from the one to the other is by the river *Elouki*. Some little forts and settlements of the natives are scattered here and there upon its banks.

The *Bolschaia-reka*, or Great River, called by the natives *Kreksha*, runs out of a lake 185 versts to the east from its mouth, and falls into the *Penschinska* sea in the latitude of 52° 45′. Its mouth is reckoned to be 555 versts to the south distant from that of the *Tegbil*. It is called Great upon this account, that of all the rivers that fall into the *Penschinska* sea this is the only one which they can navigate from its mouth nearly to its spring, and this not without some difficulty, on account of its rapidity and the great number of islands. At the time of high water it is so deep at the mouth that large vessels may enter; for the water has been observed to rise at full and new moon very little less than nine *Paris* feet or four *Russian* yards. It receives a multitude of rivulets; the most considerable of which is the *Bistroy* or Rapid River, so called from the swiftness of its stream, caused by the many shoals and cataracts. You may go from the mouth of the Great River to that of the *Bistroy*, and up within 40 versts of its head; and from thence over a carrying place to the river *Kamtschatka*, that springs out of the same marsh, and runs quite to the Eastern Ocean. And though this passage must be laborious and tedious, upon account of the rapidity of the river, and the many shoals and cataracts, where every thing must be carried by land, and which would render it impossible to advance more than 10 versts in a day (as I found in my way to *Kamtschatka* in the year 1739, when the boats were carried over the marsh, about two versts from the head of the Rapid, to *Kamtschatka*); yet, considering

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 attempt by land, and the paſſage by ſea was not leſs dangerous; beſides there was no veſſel either in the port of Saint Peter and Saint Paul, or of Bolcheretſk *.

M. Koſloff had his affairs to ſettle, which, with the preparations for our departure, detained us ſix days longer, and afforded me time to ſatisfy myſelf that the frigates were not likely to return. I embraced this opportunity of commencing my obſervations, and making minutes of every thing about me. I attended particularly to the bay of Avatcha, and the port of Saint Peter and Saint Paul, in order to give a juſt idea of them.

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This bay has been minutely deſcribed by captain Cook, and we found his account to be accurate. It has ſince undergone ſome

* The navigation is ſufficiently ſafe in ſummer, and is the only mode of travelling that is adopted.

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alterations; which, it is ſaid, are to be followed by many others; particularly as to the port of Saint Peter and Saint Paul. It is poſſible indeed, that the very next ſhip which ſhall arrive, expecting to find only five or ſix houſes, may be ſurpriſed with the ſight of an entire town, built of wood, but tolerably fortified.

Such at leaſt is the projected plan, which, as I learned indirectly, is to be aſcribed to M. Kaſloff, whoſe views are equally great, and conducive to the ſervice of his miſtreſs. The execution of this plan will contribute not a little to increaſe the celebrity of the port, already made famous by the foreign veſſels which have touched there, as well as by its favourable ſituation for commerce *.

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* According to the accounts of the earlieſt navigators, it is the moſt commodious port in this part of Aſia, and ought to be the general depôt for the commerce of the country. This would be ſo much the more advantageous, as the veſſels which frequent the other ports, commonly conſider themſelves

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To understand the nature, and estimate the utility of this project, nothing more is necessary

selves as fortunate if they escape shipwreck; and for this reason the Empress has expressly prohibited all navigation after the 26th of September.

I learned a circumstance at the same time, which confirms what I have said, and seems to have occasioned the first idea of these improvements.

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An English ship, belonging to M. Lanz, a merchant of Macao, came to anchor in the port of Saint Peter and Saint Paul, in the year 1786. Captain Peters, who commanded the vessel, made proposals of commerce to the Russians, of which the following are the particulars. By a treaty which he had entered into with a Russian merchant, named Schelikhoff, he engaged to carry on a commerce with this part of the states of the Empress, and demanded goods to the amount of eighty thousand roubles. These goods would probably have consisted of furs, which the English expected to find a market for in China, from whence they would have brought back in exchange stuffs and other articles useful to the Russians. Schelikhoff repaired immediately to Saint Petersburg, to solicit the consent of his sovereign, which he obtained; but while was endeavouring to fulfil the conditions of his engagement, he learned that the English vessel had been lost upon the coast of Copper Island *(Ile de Cuivre)* in its return to Kamtschatka from the north-west part of America, where it was probable it had sailed, in

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neceſſary than to have an idea of the extent and form of the bay of Avatſcha, and the port in queſtion. We have already many accurate deſcriptions, which are in the hands of every one. I ſhall therefore confine myſelf to what may tend to illuſtrate the views of M. Kaſloff.

The port of St. Peter and St. Paul, is known to be ſituated at the north of the entrance of the bay, and cloſed in at the ſouth by a very narrow neck of land, upon which the oſtrog*, or village of Kamtſchatka

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in order to begin its cargo, which it expected to complete at the port of Saint Peter and Saint Paul. Two only of the crew were known to have been ſaved, a Portugueſe and a Bengal negro, who paſſed the winter at Copper Iſland, from whence a Ruſſian veſſel conveyed them to Nijenei-Kamtſchatka. We joined them at Bolcheretſk, and it was M. Kaſloff's intention to ſend them next ſeaſon to Peterſburg.

* The word *oſtrog* properly ſignifies a conſtruction ſurrounded with palliſadoes. Its etymology may be derived, I imagine, from the entrenchments haſtily conſtructed by the Ruſſians

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ſchatka is built. Upon an eminence to the eaſt, at the moſt interior point of the bay, is the houſe of the governor *, with whom M. Kaſloff reſided during his ſtay. Near this houſe, almoſt in the ſame line, is that of a corporal of the garriſon, and a little higher inclining to the north, that of the ſerjeant, who, next to the governor, are the only perſons at all diſtinguiſhed in this ſettlement, if indeed it deſerves the name of ſettlement. Oppoſite to the entrance of the port, on the declivity of the eminence, from which a lake of conſiderable extent is ſeen, are the ruins of the hoſpital mentioned in captain Cooke's voyage †. Below theſe,

Ruſſians to protect them from the incurſions of the natives, who, doubtleſs, did not paſſively ſuffer their country to be invaded. The appellation of oſtrog is now given to almoſt all the villages in this country.

* His name was Khaboroff, and he had the rank of a *prëporchik*, or enſign.

† At a little diſtance from this ſpot was buried, at the foot of a tree, the body of captain Clerke. The inſcription which

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these, and nearer the shore, is a building which serves as a magazine to the garrison, and which is constantly guarded by a centinel. Such was the state in which we found the port of St. Peter and St. Paul.

By the proposed augmentation, it will evidently become an interesting place. The entrance was to be closed, or at least flanked by fortifications, which were to serve at the same time as a defence, on this side, to the projected town, which was chiefly to

which the English placed upon his tomb, was on wood, and liable to be effaced. Count de la Perouse, desirous that the name of this navigator should be immortalised, without having any thing to fear from the injuries of the weather, substituted instead of it an inscription on copper.

It is needless to mention, that he enquired at the same time where the famous French astronomer, from the island of Croyere, had been buried. He entreated M. Kasloff to order a tomb to be erected, and an epitaph, which he left engraved on copper, to be placed on it, containing an elogy, and the circumstances of the death of our countryman. I saw his intentions carried into execution after the departure of the French frigates.

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be built upon the ſite of the old hoſpital; that is, between the port and the lake. A battery alſo was to be erected upon the neck of land which ſeparates the bay from the lake, in order to protect the other part of the town. In ſhort, by this plan, the entrance of the bay would be defended by a ſufficiently ſtrong battery upon the leaſt elevated point of the left coaſt; and veſſels entering the bay could not eſcape the cannon, becauſe of the breakers on the right. There is at preſent upon the point of a rock, a battery of ſix or eight cannon, lately erected to ſalute our frigates.

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I need not add, that the augmentation of the garriſon forms a part of the plan, which conſiſts only at preſent of forty ſoldiers, or Coſſacs. Their mode of living and their dreſs are ſimilar to the Kamtſchadales, except that in time of ſervice they have a ſabre, firelock, and cartouch box; in other

reſpects

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From this minute deſcription of the fort of Bolcheretſk, it muſt appear ſtrange that it retains ſo inapplicable a name; for I can affirm, that no traces are to be found of fortifications, nor does it appear that there has ever been an intention of erecting any. The ſtate and ſituation, both of the town and its port, induce me to believe, that government have felt the innumerable dangers and obſtacles they would have to ſurmount, if they were to attempt to render it more flouriſhing, and make it the general depôt of commerce to the peninſula. Their views, as I have already obſerved, ſeem rather turned to the port of Saint Peter and Saint Paul, which for its proximity, ſafety, and eaſy acceſs, merits the preference.

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There is a degree of civilization at Bolcheretſk, which I did not perceive at Petropavlofska. This ſenſible approach to European manners, occaſions a ſtriking differ-

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22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

22: Guillemard T-2 (1882) 1886 Kamchadal

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locomotion as their charges. At this rate of advance our journey's end seemed distant indeed. We pressed on, however, as well as we could, and crossed a small plain from which the base of the Avatchinska group of volcanoes was visible to our right. Their summits were hidden in thick mist, and the weather, which had hitherto been fine, now looked most threatening. Arriving at a small stream, Vodki and his two companions halted, and declaring that there was no water farther on, proceeded to unload the horses. This we soon put a stop to, and telling them that, water or no water, we had no intention whatever of camping for another hour or more, we resumed our journey. The scenery now changed, and we entered a gloomy birch-forest with much thick undergrowth. This was in places six or eight feet, or more, in height, and was composed of coarse grass and giant umbelliferæ, with an occasional blue monkshood, varied in the more open parts with large patches of yellowing bracken. Before long we reached another stream, and were thus enabled to prove the truth of our surmises; but it was not till some time later that we finally halted for the night, the horseboys being by this time scarcely in a condition to proceed farther. We were glad to pitch camp and get a rest, as it had already begun to rain. Before turning in we succeeded in finding Vodki's brandy bottle, but it was perfectly empty. The man had disposed of a pint or more of raw spirit since leaving the settlement!

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In this kind of travel movement is not very rapid for the first day or two until every one has shaken down to his work, and on the following morning we were nearly three hours in getting breakfast and striking camp. The horseboys were depressed and inclined to be penitent. If, like an old Kafir servant of mine, they estimated the amount of enjoyment of the previous night by the strength of the morning's headache, they ought, to all appearances, to have been well pleased. We had decided to leave Avatcha on our left, and to make for Stari-ostrog,[1] a small village a little higher up the Avatcha River, and forty versts from Petropaulovsk.

[1] The *ostrogs*, or small forts, were erected by the Russians in bygone days as a protection against the natives at the time of the first settlement of the country. The name now alone remains, all traces of fortification having long since disappeared.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 load. The last string was in charge of our new man, who, overcome by the "damnable iteration" of a birch-forest, fell asleep and tumbled off his horse. In his fall, unfortunately, he dislodged some of the loose packs, which, swinging under the horse's belly, started it off at full speed. Dashing wildly forward the frightened animals caught the others in rear, upsetting Vodki and communicating the stampede to the whole line. We were at the time in thick forest, and plunging into this, our cavalcade rapidly disappeared in all directions, various ominous crackings alone revealing their line of progress. When separate individuals of a string try to pass on different sides of the same tree a startling effect is very often produced, but the old and experienced packhorse knows that better results may be obtained by the navigation of a three-foot passage between two birches. We found Ivan supporting his head in both hands, and proceeded to administer a lecture and surgical relief. Vodki, by the really masterly and exhaustive manner in which he was exhibiting the expletive richness of the Russian language, was evidently not in a condition to require attention. There is always, happily, a comical side to these affairs, which makes the traveller regard "the most disastrous chances" to his baggage with tolerable equanimity.

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We pitched camp about twelve or fifteen miles from Narchiki, a little village that in bygone days was one of the palisaded *ostrogs* of the Russians; and though close to a pretty and most likely-looking stream, we were unable to catch any fish for supper, for the first and only time during our ride to the river.

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In most bush countries it is the hunter's rule to see that the fire is extinguished, or at least rendered harmless, before breaking camp. In Kamschatka the greatest care is taken about this, as bush-fires invariably cause the sables to desert the neighbourhood for many miles around. As my readers are perhaps aware, the fur of this animal is the most valuable export of the country, and a very large proportion of the inhabitants are employed for the greater part of the year in sable-hunting only. The price obtained by the hunter

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

000 civilized nations. Their number is reckoned to be 100 men or more, but not above 30 of them pay any tax, the reſt, at the time of its gathering, hiding themſelves in the mountains. They go to this iſland in the ſummer in their little boats; but in the winter they have no communication with it.

133 There is little worth notice after you paſs the above-mentioned
721 iſland, 'till you come to the *Uyulen* or *Olutora* river. Upon this
R river the *Ruſſians* twice built the *Olutorſkoy* fort. The firſt was
177 built by a native of *Jakutſki*, called *Athanaſey Petrove*, upon
.71 the ſouthern ſhore, very little above the mouth of the *Kalkina* rivulet which falls into the *Olutora* from the ſouth; and the ſecond a great deal below that place under the direction of Major *Paulutſkoy*, who was ſent there on account of the rebellious *Tchukotſkoi*; but both of them were forſaken and burnt down by the *Olutores*. The laſt fort is about two days' voyage from the mouth of the *Olutora*.

133 The *Atwaleck* cape, which extends 80 verſts into the ſea, begins near the river *Elir*, and points towards the *Govyanney* cape. The ſea between thoſe capes is called *Olutorſkoy*. The *Pockatska* riſes in the ſame plain with the river *Glotova*, which runs from the north-eaſt into the *Olutora*. From the *Kalkina*, where was built the firſt *Olutorſkoy* fort, to the river *Pockatska*, is five days' journey with rein-deer, reckoning for each day between 30 and 40 verſts. Between the *Katurka* and the land oppoſite to *Anadir*, there projects into the ſea a rocky cape, called *Kateerſkoy* in 64° 15′ north latitude. The diſtance from the *Petropaulauskaya* haven to the mouth of the *Anadir*, as obſerved by the ſea-officers, is 19° 20′; and the ſea coaſt from the *Kurilskaya Lopatka* to the *Tchukotskoi* cape, north eaſt, which lies in 67°, is for the moſt part mountainous, eſpecially in thoſe places where the capes project into the ſea.

We

1: Krasheninnikov N-S (1736-40) 1764 Kamchadal

the worſt roads, and to free themſelves very often overturn their driver. 484

The beſt travelling is in the month of *March* or *April*, when the ſnow is turned hard or frozen a little at top; however, there is ſtill this inconvenience attending it, that ſometimes travellers are obliged to lodge two or three nights in deſert places; and it is difficult to prevail upon the *Kamtſchadales* to make fire either for warming themſelves or dreſſing victuals, as they and their dogs eat dried fiſh, and find themſelves ſo warm wrapt in their furs that they want none; nay, it is ſurpriſing to ſee all the people of this climate bearing the cold ſo well, that after having ſlept a whole night very ſound they awake next morning as refreſhed and alert as if they had lain in the warmeſt bed. This ſeems to be ſo natural to all here, that I have ſeen ſome of them lie down with their backs uncovered againſt a fire, and notwithſtanding the fire has been burnt out long before morning, yet they continued to ſleep on very comfortably, and without any inconvenience. 484 147 573 147

CHAP. X.

Of the Kamtſchadales' *Method of making* WAR. 721

ALTHOUGH before they were conquered by the *Ruſſians*, the *Kamtſchadales* did not ſeem to have had any ambition of increaſing their power, or enlarging their territories, yet they had ſuch frequent quarrels among themſelves that ſeldom a year paſſed without one village or other being entirely ruined. The end of their wars was to take priſoners, in order

724 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

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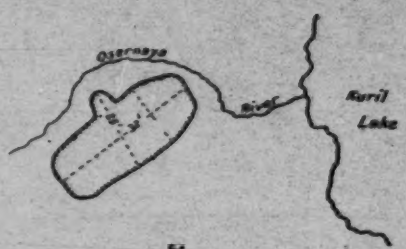
(54) Four ornamented pottery fragments (2940).
(55) Figure 51 (2941), fragment of some bone implement, much decayed, possibly a part of a sledge runner, 2/9 natural size.
(56) Figure 52 (2943), a bone hook of reindeer antler, probably used as a root digger, 1/3 natural size.
(57) Two handles of bone spoons (2944, 2945).
(58) Six fragments of bone implements (2946).
(59) Four fragments of bone implements (2947).
(60) Seven fragments of bone implements (2948).
(61) Four scrapers (2949).

We see from the number of specimens found (about 230), that the excavation of the Kavran site was particularly productive.

The ancient site on the bank of the Osernaya River is 2 miles from the point where it flows out to the sea from the Kuril Lake. There were several depressions of former dwellings, and we excavated the largest of these. The pit before digging was 2 feet deep. Then followed a layer of black earth more than a foot deep, after which the primeval soil consisting of gravel appeared. In the layer of black earth were found traces of a fireplace, two whetstones, two pottery fragments, one of



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which had a handle inside, and a Japanese coin. Remains of posts were not discovered. The pit had a rectangular form like the pits on the shores of the Nalacheva Lake. Those of the Kulki and Kavran Rivers had rather a circular form.

Higher in the rocky bank over the described pit was a small depression resembling a pit. We excavated it and found a layer of mold about a foot deep in which were only a fragment of pottery, with an ear inside, and some bones of a bear.

We came to the ancient site on the shore of the Kuril Lake on August 8 and diggings were carried on from August 9 to 14. We left the lake August 16. In order to reach Lake Kuril we had to ascend the Osernaya River, flowing out from the lake into Okhotsk Sea. The river is fifty-five miles long.

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The mouth of the river is connected with some historical episodes. During the Russian-Japanese War, in May of 1905, a fleet of Japanese schooners landed there with the intention of taking possession of Kamchatka. The Japanese were volunteers, numbering 150, under the command of the retired Captain Hundsi Naridata. At that time there was no settlement at the mouth of Osernaya River. The Japanese put up a trenched camp, mounted their only cannon and hoisted a Japanese flag. Except the visit to Petropavlovsk by Admiral Togo's squadron,

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 this was the only attempt to take Kamchatka by force, and it ended very unhappily for the Japanese.

721 When the Japanese were marching along the coast to the village Yavino, its inhabitants fled into the mountains, abandoning their houses, belongings, cattle and dogs. The Japanese finding no one in the village, occupied the Russian houses, hoisted a Japanese flag over the chapel and put up a post with a declaration of the annexation of Kamchatka to Japan. Some days later the Japanese returned to Osernaya taking with them all the cattle, horses and dogs from Yavino.

In the meantime a troop of Russian militia under command of Ensign Shaba arrived at the mouth of the Yavino River in a schooner from Bolsheretzk, and another detachment under Lieutenant Sotnikoff reached Yavino by land. Sotnikoff took command of both detachments. The combined Russian forces numbered only 80, and Sotnikoff did not venture an open attack but took refuge in a ruse. He despatched a man to Hundji, who pretended he had been sent by the inhabitants of Yavino to ask for a doctor and victuals. Hundji, a doctor and two interpreters all unarmed left Osernaya for Yavino. Along the way they were attacked from ambush. The interpreters were shot and Hundji and the doctor captured. Later a Russian detachment had a skirmish with a Japanese vanguard in which one Russian was killed and three were wounded. The Japanese doctor dressed their wounds. On the following morning the Japanese shot the cattle and dogs and left Osernaya in their schooners for the south.

609 This adventure resulted in the killing by the Russians of peaceful Japanese fishermen in many villages on the western coast of Kamchatka. Usually
563 the Kamchadal are well disposed toward the Japanese, who are just in their relations to the former, attending their sick and furnishing them with medicine.

167 After the Russian-Japanese War many Russian adventurers, mostly discharged soldiers, found their way from Vladivostok to Kamchatka. Some were attracted
563 by reports of rich profits obtained by sable hunting, others by the desire to introduce agriculture in Kamchatka, but they all remained and mixed with the native fishing population, Kamchadal and Russians. Another company of adventurers settled at the mouth of the Osernaya River, forming a new village. At first their condition was deplorable. Fishing was abundant but there was no market for exchange. They had no money, flour, tea and other commodities to which they were accustomed in their native places of European Russia. The women particularly longed for bread, and often said: "We would give up all the fish for one piece of bread, not mentioning our melons, fruits, meat, milk products and sweets." The majority of the immigrants were Ukrainians of southern Russia.

167 But two years before our arrival there all had changed. Enterprising firms, partly with American money, began to develop fisheries for the export of Kam-
228 chatka salmon. A saltery and a cannery were established in Osernaya and the
563 Russian colony there worked during the short summer as laborers. The fishing company furnished them with money, food, clothing, fuel and building material
464 and they were able to withstand the hardships caused by the most inhospitable of

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostroshka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

22: Guillemard T-2 (1882) 1886 Kamchadal

136 yellow foxes (*Vulpes fulvus*), who sat inspecting us curiously as we floated down, and were none the worse for their temerity. According to our hunters, these animals are not nearly as common now as formerly, though from what reason it is difficult to say, as the skin is of no great value, and they are in consequence not much hunted. Ducks of the kinds I have already mentioned were in great numbers, and the Merganser (*M. serrator*) also seemed fairly abundant. It was of course impossible for us to reach Werchni Kamschatka before nightfall, so, having made about forty versts, we landed on one of the broad pebbly beaches, where the spring freshets had already collected abundant firewood
252 for us, and pitched our camp. The Sherowmy men had a simple but effective plan of cooking duck that I had never seen before. The bird is plucked with care, so as to leave the skin unbroken, and is not drawn. A stick is forced down the throat, and the other end stuck into the ground close to the fire. The effect produced when a party of a dozen are thus cooking their suppers is not a little absurd: it is as if the camp-fire had burst into a perfect girandole of naked ducks, who fly quacking from it in open-mouthed alarm.

We had hitherto been favoured with far finer weather than that usually to be expected during late autumn, but the next day dawned threateningly, and before long fulfilled its promise to the utmost. A pall of thick leaden clouds with ragged edges hung over us, and a steady downpour that showed every prospect of
161 continuance soon commenced. Hour after hour we paddled on
721 through the driving rain, and it was not until after mid-day that
361 we stepped ashore, wet and cold, at the hamlet of Werchni Kamschatka. Like most of these places, it is composed of a bare dozen
R of huts, with a total population of less than fifty souls; but it
177 enjoys the distinction of being the only settlement on the Kams-
. 72 chatka River that is marked on the English chart of the country. In bygone days it may have merited it, for it was one of the first *ostrogs* established by the Russians after their conquest of the

22: Guillemard T-2 (1882) 1886 Kamchadal

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peninsula. Now, however, Melcova must be regarded as the chief town of the interior, and its proximity—for it is only fifteen versts distant—must always effectually keep its rival in check. We were glad to get warm and partially dried at the house of the head-man before starting again for this latter place. Some few signs of cultivation were apparent: a few potatoes and turnips, and a small field of rye, the first cereal we had met with since our arrival in the country. It looked miserable enough under the pouring rain, and probably had little if any chance of ripening.

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Three more hours of rain and paddling brought us to Melcova. It was almost too wet for shooting, but we noticed two or three small parties of the red-necked Phalerope (*L. hyperboreus*) on our passage. Those that we obtained were in autumn plumage, and were most probably on their way to warmer latitudes. But few duck were to be seen. They had in all probability betaken themselves to the marshes at the onset of the rain, and the river was devoid of life. Before reaching the village an elaborate arrangement of fishing-stakes gave warning of the presence of what in Kamschatka may be termed civilisation. The stakes stretched right across the stream from bank to bank, but we found a small gap at the side sufficient to admit of the passage of a single canoe, and capable of being still further enlarged by pressing down the stakes. The arrangement for taking the fish consisted in the construction of small *currals* at intervals of about fifteen yards. These were long bottle-shaped baskets on the lobster-pot principle, furnished with doors opening at the lower end, by means of which the fish could be secured by gaff or otherwise. We learnt that there were very strict rules with regard to the complete barring of the river at this spot. The inhabitants are obliged to leave a free passage for the fish at the time of their first arrival in the spring, and also on certain days in the week or month at a later period. But for this arrangement the people of Sherowmy and Werchni Kamschatka would of course be without means of subsistence during the winter months.

721 order to employ them, if males, in their hardeſt labour, or, if females, either for wives or concubines; and ſometimes the neighbouring villages went to war for quarrels that happened among the children; or for neglecting to invite each other to their entertainments.

726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

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609 to the Coſſacks in their conqueſt of the whole nation; for
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.72 village

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

village to demand their tribute, they were received with all marks of friendſhip, and not only the tribute was paid, but likewiſe great preſents were made them. Thus the natives having lulled them into a ſtate of ſecurity, they either cut their throats in the night-time, or ſet fire to their huts, and burnt them with all the Coſſacks which were within. By ſuch ſtratagems 70 people were deſtroyed in two places, which, conſidering the ſmall number of Coſſacks that were there, was a very conſiderable loſs: nay, it has ſometimes happened that when they had no opportunity of deſtroying the Coſſacks at firſt, they have for two years quietly paid the tribute, waiting 'till they could find an opportunity of doing it. 726 R. 177 .72

By this cunning the *Kamtſchadales* deſtroyed at firſt many Coſſacks, but now the latter are more upon their guard, and are particularly afraid of extraordinary careſſes, always expecting ſome bad intention when the women in the night-time retire out of their huts. When the *Kamtſchadales* pretend to have dreamed of dead people, or go to viſit diſtant villages, there is reaſon to dread a general inſurrection.

When this happens, they kill all the Coſſacks which fall in their way, and even the *Kamtſchadales* who will not join in the rebellion. As ſoon as they hear that troops are coming againſt them, inſtead of going to oppoſe their enemies, they retire to ſome high place, which they fortify as ſtrongly as they can, and building huts there, wait 'till they are attacked, and then they bravely defend themſelves with their bows and arrows, and every other method they can think of; but if they obſerve, that the enemy is likely to make themſelves maſters of the fortreſs, they firſt cut the throats of their wives and children, and afterwards either throw themſelves down the precipice, or with their arms ruſh in upon their enemies that they 726 762 R. 177 .72

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

726 may not dye unrevenged: this they call making a bed for them-
762 ſelves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the reſt were all murthered, and the rebels threw themſelves from the hill, upon which they were fortified, into the ſea.

669 From the time that *Kamtſchatſka* was ſubdued, there have
726 been only two rebellions which could be properly called ſo. The
175 firſt happened in the year 1710, in *Bolſcheretſkoi Oſtrog*; and the other in the year 1713 upon the river *Awatſcha*. Both
R. of them were, however, unfortunate for the authors. In the
177 firſt, great numbers beſieged the *Bolcheretſkoi* fort, in which were
.72 only 70 Coſſacks, 35 of whom making a ſally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry ſuch numbers were drowned that the river was almoſt choaked up by their dead bodies. The rebels upon the *Awatſcha* thought themſelves ſo ſure of deſtroying the *Ruſſians* that they brought thongs to bind them; however the rebels were either all killed or taken priſoners.

411 Their arms are bows and arrows, ſpears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-ſtrings of the blood veſſels of the whale; and their arrows are commonly about four feet long, pointed with flint ſtones, or bone; and though they are but indifferent, yet they are very dangerous, being all poiſoned, ſo that a perſon wounded by them generally dies in twenty-four hours, unleſs the poiſon be ſucked out, which is the only remedy known. Their ſpears are likewiſe pointed with flint or bone; and their coats of mail are made of mats, or of the skins of ſeals and ſea horſes, which they cut out into thongs, and plait together. They put them on upon the left ſide, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breaſt.

When

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726 Their wars are carried on more by ſtratagem than bravery; for
703 they are ſuch cowards that they will not openly attack any one unleſs forced by neceſſity: this is the more extraordinary, becauſe no people ſeem to deſpiſe life more than they do, ſelf-murther being here very frequent. Their manner of attacking is this: in the night-time they ſteal into the enemy's village, and ſurpriſe them, which may eaſily be done as they keep no watch; thus a ſmall party may deſtroy a large village, as they have nothing more to do than to ſecure the mouth of a hut, and ſuffer no body to come out, which only one can do at a time; therefore whoever firſt attempts to eſcape is knocked down, or obliged to ſubmit to be bound.

727 The male priſoners which they take, eſpecially if they are men of any conſequence, are treated with all manner of barbarity, ſuch as burning, hewing them to pieces, tearing their entrails out when alive, and hanging them by the feet. This has been the fate of ſeveral *Ruſſian* Coſſacks during the diſturbances of *Kamtſchatka*; and theſe barbarities are exerciſed with great ſhew of triumph and rejoicing.

619 Theſe private differences among themſelves were very uſeful
609 to the Coſſacks in their conqueſt of the whole nation; for
186 when the natives ſaw the latter attacking one village, ſo far were they from aſſiſting their countrymen, that they rejoiced at their deſtruction, not conſidering that the ſame was to be their
726 fate next.

R. In their wars with the Coſſacks, they deſtroyed more by
177 ſtratagem than by arms; for when the Coſſacks came to any
.72 village

6: Antropova E-4 (no date) 19-4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[179] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

The quelling of rebellions by armed force and the arbitrary rule of the
[161] local officials reduced the Itel'men population. But the principal reason
[173] for the population decline was the epidemics of smallpox, typhus and other
diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
erty in the hands of some individuals. As early as the 1730's, there were
556 toyons (elders) who lent sables to their kinsmen to enable them to pay their
426 tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

133 731 After this, in *Awatscha* and the islands near the *Kurilskaya Lopatka* they felt a terrible earthquake and motion of the waters, which was observed in the following manner. The earthquake began about three o'clock in the morning the 6th of *October*, 1737, and continued about a quarter of an hour, and many of the *Kamtschatkoi* huts and tents were overturned. At the same time the sea was driven upon the shore, and rose about 20 feet; immediately after all the water was carried back to a great distance from the shore, and then it returned again higher than before, and afterwards retired so far that one could not see it from the shore. At that time, in the passage between the first and second of the *Kurilski* islands, they observed clusters of rocks in the bottom of the sea that had never been seen before, although they formerly had great earthquakes and extraordinary agitations of the sea. A quarter of an hour after this the earthquake returned with most terrible waves, and the sea overflowed the shore 200 feet high, which, as formerly, immediately retired. This rolling motion continued for a long time, the sea frequently approaching the shore and departing from it. Before every earthquake a great, heavy, rumbling noise was heard from this overflowing of the sea. The inhabitants were all ruined, and many of them miserably lost their lives. In several places the meadows, little hills, and fields, were turned into salt-water lakes. This was not so violent upon the *Penschinska* sea as upon the Eastern Ocean; and the people about the Great River suffered very little.

At this time we sailed from *Ochotska* to the mouth of the Great River; and when we came on shore the 14th of *October*, the earthquake was still perceptible, which was sometimes so strong that we could not stand upon our feet; and this continued to the spring of the year 1738: however, it was more upon the *Kurilskaya Lopatka* and the coast of the Eastern Ocean than in those places that were more remote from the sea.

The

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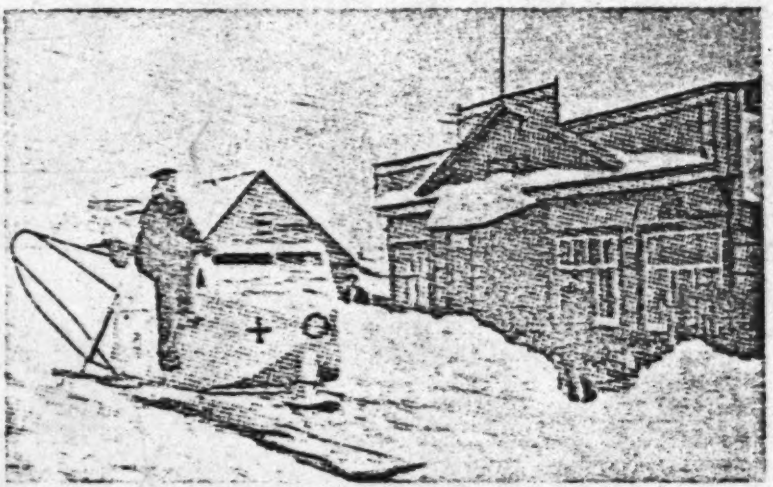

Medical aerosleigh.

175 wheel transport such as the cart,
648 was unknown before the Revolution. For cattle, the Itel'mens built cold
231 barns or sheds and provided some supplementary fodder in winter. How-
ever, the milk yield was very low, and livestock mortality was high.

[493] From the Russians, the Itel'mens obtained improved means of pro-
duction: firearms, nets, etc. Stone and bone implements were completely
175 abandoned in favor of metal ones. Russian clothing and utensils began to
177 come into use. The primitive semidugout was gradually (and by the begin-
648 ning of the 19th century, completely) replaced by wooden board dwellings,
and occasionally by log houses of the Russian type. Simultaneously with the
absorption of Russian culture by the Itel'mens, a reverse process was also
taking place in the 18th and 19th centuries. Soldiers, Cossacks and
peasants, who were systematically being resettled on the peninsula after
[563] the middle of the 18th century, married Itel'men women and acquired some
elements of their way of life and culture. The result was that peculiar
population of the peninsula which became known, as we have pointed out
earlier, under the name of Kamchadals and was often mistakenly classified
as Itel'men.

175 In the early 20th century, the condition of the Itel'mens deteriorated in
648 consequence of the development of the Japanese capitalist fishing industry
226 in Kamchatka. Predatory industrial fishing at the mouths of rivers during
231 spawning runs caused almost annual failures of the native catch and led to
inevitable famines.

175 Contemporary Life of the Itel'mens
648

During the civil war in the Far East, the Itel'mens actively helped the guerrilla units, and later the Red Army troops, in liquidating the White bands. The guerrilla units included many residents of the villages of Napana, Utkholok, Kovran and Sedanka. In 1921, the Soviet government was firmly established on the peninsula, and the reconstruction of the economy was launched.

hazy, the clouds heavy, and always dark; while *Kamtſchatka* appears like another world, where the land lies higher, and the air is clear and ſerene. 132

The ſnow lies always deeper upon the *Lopatka* than upon the northern ſide of *Kamtſchatka*; ſo that, if it be twelve feet in depth about the *Lopatka*, upon the *Awatſcha* and the Great River it is not ſo deep by one third, and at the ſame time lies lighter and more equal, by reaſon that the winds are not ſo high there. About *Tegbil* and *Karaga* the ſnow is ſeldom deeper than a foot and a half: hence the reaſon appears why the *Kamtſchadales* do not keep rein-deer as well as the *Koreki*, but depend upon the fiſh for their nouriſhment, which upon the north-eaſt and north-weſt coaſt from the Great River is ſo ſcarce, that unleſs theſe barbarous creatures could digeſt every thing they can get down, they would not be able to ſupport life; for, though throughout the country of *Kamtſchatka* there would be food enough for rein-deer, yet the depth of the ſnow renders it impoſſible to maintain a number of them; and what rein-deers we had occaſion for in the expedition were never kept here in the winter, the depth of the ſnow making it hard for them to dig down to their food. 132 182 233 105

The force of the ſun reflected from the ſnow in the ſpring is ſo great, that the inhabitants are as tawny as *Indians*; nay, they have their eyes ſpoiled and blinded thereby: therefore the natives generally wear covers pierced with ſmall holes, or nets of black hair, to leſſen the number of rays which would otherwiſe fall upon their eyes. This is occaſioned by the great winds, which drive the ſnow ſo cloſe together that it is almoſt as hard and ſolid as ice, and will not allow the rays of the ſun to penetrate, but reflects them with greater force upon the very delicate and ſenſible nerves of the retina than they are able to bear. Mr. *Steller* ſays, that neceſſity forced him to find out a remedy for the pain and inflammation of the eyes, which generally gave relief in ſix 132 293 732 142 000

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	5.4	1,495 mm.	4.8
Length of head	188 mm.	6.8	182 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.6

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kurll Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

[P.90]

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●732

A. Elders of the villages of the western shore of Kamchatka.
B. Group of blind men and women of the village Kharyusovo.

7:Lesseps T-3 (1787-88)1790 Kamchadal

164 peninſula. It began at Anadirſkoi; it is
278 not known how it was brought there,
757 though the Ruſſians are alſo accuſed in this
inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed
births. Such as are deformed among them,
have become ſo in conſequence of a con-
ſiderable fall, though this is not a very com-
mon occurrence, as they are accuſtomed to
fall from their balagans. They are but

29:Cochrane T-2(1821-22)1824 Kamchadal

273 Another great cause of this ravage in population
435 has arisen from the introduction of spirits: a Kamt-
563 chatdale will sell his last sable or fox for a glass
733 of it, though he is not physically strong enough to drink any thing of the kind. When it is considered that sixteen thousand bottles of this trash are consumed in the short period of three or four months by six or seven hundred people, we may well feel pity and surprise—pity for the poor women and children, and surprise at the means of getting either the money or sables. Such a quantity of spirit ought to sell for fifty thousand roubles, which is one hundred per cent. upon the price at Okotsk, but it is in reality sold for twice that sum. When it is recollected that officers, soldiers, sailors, merchants, and priests travel round the Peninsula for the purposes of trade, it will be less wonderful when I assert that each bottle of spirits sold to the Kamtchatdales, produces the value of ten and twelve shillings. Now allowing half the quantity imported (eight thousand bottles) to be consumed by the aborigines, this would produce from eighty to one hundred thousand roubles, while the cost is, in Okotsk, only twenty-five thousand. I have seen a bottle of spirits sold for a sable, and afterwards, when the party was drunk, a bottle of adulterated liquor has fetched the same price: in short, I have seen three and even four sables given for two bottles of spirits.

Allowing seven hundred and fifty families of the

29:Cochrane T-2 (1821-22)1824 Kamchadal

273
435
733

Koriaks and Kamtchatdales, which is five to each family, and that half the quantity of imported spirit is consumed by them, it will appear that each family consumes at least twelve bottles in four months. By this plan the poor purchaser is drunk for days together, and for the rest of the year can get nothing to cheer him under his depression. The cost of that spirit to the Kamtchatdales is one hundred and fifty or two hundred roubles, a prodigious sum for a poor family to expend upon an article so pernicious in its moral and physical effects. Such a sum of money in Kamtchatka would produce near six or eight hundred pounds weight of flour; enough to support a small family during a whole year: or, such a sum would enable them to purchase proper clothing, culinary utensils, nets, twine, tobacco, axes, and knives. The evil of these grog-shops is carried to so ruinous an extent, that the children of the natives are left for three and four days without any food, save yukola, dried fish, doled out to them one or twice within that time. I have known instances of mothers and children being left without any means of support, in consequence of the retailing of such trash being allowed. The yukola and the bark of trees is, in such cases, almost the only nourishment the women and children can procure for several days. If they happen to be possessed of a cow, they are considered very fortunate. It needs little philosophy to prove that it is only by taking care of the rising

is only the richer ſort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 556
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. Linn. Succ. Spec. 1. French willows.

1. [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.

boil

136 rity in killing of deer, which they practiſe in this manner :—They climb up ſome tree, carrying with them a parcel of ſuch moſs as the deer uſe to eat. This they let fall from the tree, and if the deer [1] eat it, they throw themſelves down upon his back; then faſtening themſelves between the horns, they tear out his eyes, and give him ſo much pain, that the miſerable animal, to put an end to his torment, or if poſſible to free himſelf from the cauſe of it by deſtroying his enemy, ſtrikes his head againſt the trees, which generally kills him. No ſooner is he brought down than the glutton divides his fleſh carefully, and hides it in the earth, to ſave it from being ſeized by any other creature; and never eats a bellyful before he has done this. In the ſame manner, upon the river *Lena*, they deſtroy horſes. They are eaſily tamed, and are capable of learning ſeveral tricks. It has been ſaid, but we never heard it aſcertained, that they carry their gluttony to ſuch a degree as to be obliged to relieve themſelves by ſqueezing their over-ſwoln bodies between two trees to unburthen their bellies of the inſufferable load. Thoſe that are tamed are not ſo voracious; but perhaps theſe animals are not alike in all countries.

Bears and wolves are ſo numerous here, that they fill the woods and fields like cattle; the bears in ſummer, and the
136 wolves in winter. The bears of *Kamtſchatka* are neither large
752 nor fierce, and never fall upon people, unleſs they find them aſleep; and then they ſeldom kill any one outright, but moſt commonly tear the ſcalp from the back part of the head; and, when fiercer than ordinary, tear off ſome of the fleſhy parts, but never eat them. The people who have been thus wounded, are called *Dranki*, and are frequently to be met with. It is remarked here, that the bears never hurt women; but, in the ſummer, go about with them like tame animals, „eſpecially

1 [Original torn. Probably "Comes to."

especially when they gather berries. Sometimes, indeed, the bears eat up the berries which the women have gathered, and this is the only injury they do them. 136 752

In the season, when the fish enter the mouths of the rivers in vast shoals, great numbers of bears come down from the hills, and settle in proper places for catching them; which they do in such plenty, that they only eat and suck the bones of the heads, neglecting the bodies; but when this plenty is past, they are glad to gnaw the bones which they formerly despised. They frequently steal fish from the fishing huts of the Cossacks, although there is always a woman left to watch them. To her indeed they never do any hurt, satisfying themselves with what fish they can find. 136

Before the introduction of fire-arms, they used several devices for killing the bears. Cutting several billets of wood, they stop up the mouth of the den with them, which the bear draws in that his passage may not be shut up. This they continue until he is so straitened in his den that he cannot turn himself; then they dig down from above, and kill him with their spears. The *Koreki*, in order to catch the bears, seek out some tree that is crooked above, upon which they fasten a snare, and behind it place some proper bait; which the bear endeavouring to seize is held fast by the head or the paw. They place heavy logs of wood, in such a manner, that they will fall with the least touch and crush them. Another method is to lay a board driven full of iron hooks in the bear's tract, and near to that they place something that easily falls down; this frightening the bear by its fall, he runs upon the board with greater force; and finding first one fore paw wounded and seized by the hooks, he endeavours to free himself by beating the board with the other; thus both being fixed, he rests on his hinder legs, which causes the board to rise before his 224

eyes,

The women, as was mentioned above, who desire to have 842
children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having 847
children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs 842
and different conjurations to prevent conception. Their super- 847
stition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the 846
birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES.. 164 753

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines 757
consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

 certain

7th. Sea calves' puppying time. 805

8th. Time when the tame deer bring forth their young.

9th. When the wild deer bring forth.

10th. Beginning of the fishery.

Their division of time is pretty singular; they commonly divide our year into two, so that winter is one year, and summer another: the summer year begins in *May*, and the winter in *November*.

They do not distinguish the days by any particular appellation, nor form them into weeks or months, nor yet know how many days are in the month or year. They mark their epochs by some remarkable thing or other, such as the arrival of the *Russians*, the great rebellion, or the first expedition to *Kamtschatka*. They 212 have no writings, nor hieroglyphick figures, to preserve the memory of any thing; so that all their knowledge depends upon tradition, which soon becomes uncertain and fabulous in regard to what is long past.

They are ignorant of the causes of eclipses, but when they 821 happen, they carry fire out of their huts, and pray the luminary eclipsed to shine as formerly. They know only three constellations; the Great Bear, the Pleiades, and the three stars in Orion; and give names only to the principal winds.

Their laws in general tend to give satisfaction to the injured 681 person. If any one kills another, he is to be killed by the relations of the person slain. 754 They burn the hands of people who have been frequently caught in theft, but for the first offence the thief must restore what he hath stolen, and live alone in solitude, without expecting any assistance from others. They think they can punish an undiscovered theft by burning the sinews of the stone-buck in a publick meeting with great ceremonies of conjuration, believing that as these sinews are contracted by the fire so the thief will have all his limbs contracted.

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There is likewise another creature in these seas resembling a whale, but smaller and slenderer: the *Russians* call it a wolf, and the *Kamtschadales*, chethak. Its fat is of such a nature, that, when swallowed, it presently passes insensibly. The natives sometimes use it as a medicine in case of costiveness, but oftener to play tricks with one another. They feed upon the flesh and tongue, which have not the same quality. 136 278 262 522

Notwithstanding the great plenty of whales upon this coast, the scarcity of food is sometimes so great, that whole villages die of hunger. In the month of *April*, 1739, I saw a melancholy instance of their being obliged, out of necessity, to eat some poisonous whale's fat, at a village upon the river *Berofover*, called *Alaune*, where I observed the people all look pale, as if they had been sick for a long time; when I asked the reason, I was told, that just before my arrival one of the natives was killed by eating of whale's fat; and as all the rest had eat of the same, they dreaded the same fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the physicians there, fastened him with ropes to a ladder, and placed themselves on both sides of him with great clubs in their hands, with which they tossed firebrands out of the huts, and the wife of the sick person coming behind him, made several conjurations over his head, begging death to spare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly surprise me; I rather wondered that such things did not happen oftener, especially from those whales which are killed with poisoned darts. However the *Kamtschadales* think so little of the consequences, that they had rather risk their lives than be deprived of the pleasure of eating whale's fat. 262 255 278

After the whales, we must mention the fish * mokoe, which at *Archangel* is called akula. It is about three fathoms long; 136

* Canis Carcharias Autoris.

brings

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XII.

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Of their SHAMANS, *or Conjurers.*

THE *Kamtſchadales* have none who are profeſſed *Shamans*, or conjurers, as the neighbouring nations have; but every old woman is looked upon as a witch and an interpreter of dreams. In their conjurations they whiſper upon the fins of fiſhes, the ſweet graſs, and ſome other things; by which means they cure diſeaſes, divert misfortunes, and foretel futurity.

787 They are very great obſervers of dreams, which they relate to one another as ſoon as they awake in the morning, and judge from thence of their future good or bad fortune; and ſome of theſe dreams have their interpretation fixed and ſettled. Beſides this conjuration they pretend to chiromancy, and to foretel a man's good or bad fortune by the lines of his hand; but the rules which they follow are kept a great ſecret.

CHAP. XIII.

796

Of their CEREMONIES.

THE *Kamtſchadales* always celebrated three days in the month of *November*, which is hence called the month of Purification. *Steller* imagines, that this was firſt inſtituted by their anceſtors to return thanks to God for all his bleſſings; but that afterwards, through the ſtupidity of theſe people,

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

7: Lesseps T-3 (1787-88) 1790 Kamchadal

They are but
164 little ſubject to the ſcurvy; their uſe of
757 wild garlic, and various fruits and berries, is a preſervative. The Ruſſians and other ſettlers are more frequently afflicted with this diſeaſe.

Conſumptions are frequent enough; but boils, tumors, abſceſſes, and wens, are very common. They have no mode of curing them, but by inciſion or extirpation; and they uſe for theſe operations a knife, or perhaps ſimply a ſharp ſtone, which ſupplies the place of a lancet. Such inſtruments are calculated to impreſs us with no very high opinion of the ſkill of the operators; and it is obvious that the art of ſurgery, brought to ſuch perfection with us, is in a ſtate of the utmoſt barbariſm at Kamtſchatka.

178 Phyſic does not appear to have made a
756 greater progreſs; though it muſt be confeſſed

7:Lesseps T-3 (1787-88)1790 Kamchadal

178/756 feſſed that theſe people have gained ſomething by learning to diſtruſt their impoſtors and abſurd empiricks. Formerly, ſelf-created magicians, called *tchamans*, taking advantage of the credulity of the Kamtſchadales, turned doctors of phyſic, and thus ſecured to themſelves a double claim to their veneration and confidence*. Their ſtrange dreſs contributed to the impoſition, and ſuited perfectly their extravagant mummeries. What was told me upon the ſubject would exceed the utmoſt ſtretch of faith, if we had never heard of the Bohemians and other ſorcerers of this kind. It is not poſſible to form an idea of the buffooneries of theſe ſuppoſitious phyſicians, and the impertinencies they relate, to make their preſcriptions or pretended revelations go down. It is probable that their cures

* In an oſtrog at ſome diſtance from Bolcheretſk, I had afterwards an opportunity of conſidering this ſubject more fully, and my obſervations will be found in their proper place.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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were frequently attended with fatal conſequences, and that the number of victims equalled that of their patients. Tired at laſt of being duped at the expence of their lives, the Kamtſchadales began to be diſſatisfied with theſe impoſtors, who gradually loſt their credit, and ſunk into contempt and oblivion. Such has been the fate alſo of the chamans. The feeble light which the Ruſſian commerce diffuſed through the country, proved ſufficient to open the eyes of the inhabitants. They perceived at once the abſurdity of the magic art of their doctors. As it ceaſed to be reſpected, it was no longer lucrative, and the number of magicians diminiſhed of courſe. Diſguſted with the trade, the men abandoned it; and it has ſince been taken up by ſome old women, who, poſſeſſing leſs ſkill, have doubtleſs fewer cuſtomers *.

The

* The revolution which took place in Kamtſchatka reſpecting the chamans, is the preciſe hiſtory of all our mountebanks.

7:Lesseps T-3 (1787-88)1790 Kamchada'

000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

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The oſtrog of Machoure, before the introduction of the ſmall-pox, was one of the moſt conſiderable in the peninſula; but the ravages of this cruel diſeaſe, have reduced the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

7:Lesseps T-3 (1787-88)1790 Kamchadal

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men and women, are chamans, or believers in the witchcraft of these pretended sorcerers. They dread to an excess the popes or Russian priests, for whom they entertain the most inveterate hatred. They do all they can to avoid meeting them. This is sometimes impossible, and in that case, when they find them at hand they act the hypocrite, and make their escape the first opportunity that offers. I attribute this fear to the ardent zeal which these priests have doubtless shown for the extirpation of idolatry, and which the Kamtschadales consider as persecution. They accordingly look upon them as their greatest enemies. Perhaps they have reason to believe, that in wishing to convert them, the overthrow of their idols was not the only thing these missionaries had in view. These popes probably set them no example of the virtues upon which they declaim. It is suspected that their object is the acquisiton of wealth,

rather

7:Lesseps T-3 (1787-88)1790 Kamchadal

797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka* *, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller.

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 776 786 534 177 Koutka their new-born children, who, the moment they have left their cradle, are destined to become chamans. The veneration of the inhabitants of this village for sorcerers can scarcely be conceived; it approaches to insanity, and is really to be pitied; for the extravagant and wild absurdities by which these magicians keep alive the credulity of their compatriots, excites our indignation rather than our laughter. At present they do not profess their art openly, or give the same splendour they once did to their necromancy. They no longer decorate their garments with mystic rings and other symbolic figures of metal, that jingled together upon the slightest motion of their body. In like manner they have abandoned the kind of kettle *, which they used to strike with a sort of musical intonation in their pretended en-

* A sort of *tambour de vasque* called *bouben*. It is still in use amongst the Yakoutsk, as will be seen hereafter.

chantments,

[Mashura--analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 chantments, and with which they announc-
786 ed their approach. In ſhort, they have for-
787 ſaken all their magic inſtruments. The following are the ceremonies they obſerve in their aſſemblies, which they are careful to hold in ſecret, though not the leſs frequently on that account. Conceive of a circle of ſpectators, ſtupidly rapt in attention and ranged round the magician, male or female, for as I have before obſerved, the women are equally initiated into the myſteries. All at once he begins to ſing, or to utter ſhrill ſounds without either meaſure or ſignification. The docile aſſembly ſtrike in with him, and the concert becomes a medley of harſh and insupportable diſcords. By degrees the chaman is warmed, and he begins to dance to the confuſed accents of his auditory, who become hoarſe and exhauſted from the violence of their exertions. As the prophetic ſpirit is excited in the miniſter of their Koutka, the animation

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 mation of the dance increaſes. Like the
786 Pythian on the tripos, he rolls his ghaſtly
787 and haggard eyes; all his motions are convulſive; his mouth is drawn awry, his limbs ſtiffened, and every diſtortion and grimace is put in practice by him, to the great admiration of his diſciples. Having acted theſe buffooneries for ſome time, he ſuddenly ſtops, as if inſpired, and becomes now as compoſed as he was before agitated. It is the ſacred collectedneſs of a man full of the god that governs him, and who is about to ſpeak by his voice. Surpriſed and trembling, the aſſembly is inſtantly mute, in expectation of the marvels that are to be revealed. The ſelf-created prophet then utters at different intervals, broken ſentences, words without meaning, and what ever nonſenſe comes into the head of the impoſtor; and this is invariably conſidered as the effect of inſpiration. His jargon is accompanied either with a

torrent

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 torrent of tears or loud burſts of laughter,
786 according ſg to the complexion of the tidings
787 he has to announce; and the expreſſion and geſture of the orator vary in conformity to his feelings. I was furniſhed with this account by perſons entitled to credit, and who had contrived to be preſent at theſe abſurd revelations.

000 There ſeems to be ſome analogy between theſe chamans, and the ſect called quakers. The quakers pretend equally to inſpiration, and there are individuls among them, who, guided by its ſuppoſed impulſe, hold forth in their ſilent meetings, and break out in piteous lamentations, or ſudden ſtarts of extravagant joy. The difference is this: theſe prompt orators harangue extempore upon the ſubject of morality, whoſe fundamental principles they endeavour to recommend; whereas the Kamtſchadale declaimers underſtand not a word of what they

29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
757 it, and laying it upon the part. They grind the roots and stalks,
742 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

ſhew itſelf under the ſnow: and I have heard an extraordinary 757
account of its virtues from the Coſſacks that were employed with captain *Spanberg* in building the ſloop Gabriel: they were ſo ill with the ſcurvy, that ſcarce any were able to work, or even to walk, ſo long as the ground was covered with ſnow; but as ſoon as the high lands began to appear green, and the wild garlick to ſprout out, the Coſſacks fed upon it greedily. Upon their firſt eating it, they were covered over with ſcabs in ſuch a manner, that the captain believed they were all infected with the venereal diſeaſe. In about a fortnight, theſe ſcabs fell off, and they were perfectly recovered of the ſcurvy.

We muſt reckon amongſt the food of the *Kamtſchadales* the 137
ſhelmina *, and the morkovai †, which is the ſtalk of a plant 262
that is hollow and juicy, ſuch as the angelica. The ſhelmina is a ſpecies of the ulmaria. Its root is blackiſh without, and white within: it ſends out from one root two or three ſtalks about a man's height; which, near the root, are about a finger thick, but above, ſomewhat thinner. The leaves ſhoot out from long branches which grow all over the ſtalk. Their upper part is green and ſmooth; and their lower rough, with high reddiſh veins. Where the branch ſprings from the root there are two leaves like thoſe above deſcribed, but ſomewhat leſs. The ſtalk is triangular, reddiſh, hard, and rough. At the top of the plant is a flower reſembling that of the ſervice-tree. It has four oval piſtils, flattened in the ſides, with downy edges; in each of which are contained two longiſh ſeeds. They are ſurrounded by ten white ſtamina, riſing above the flower; the anthera being likewiſe white. It flowers about the middle of *July*, and the ſeeds are ripe about the middle of *Auguſt*. The root, ſtalks, and

* Ulmaria fructibus hiſpidis. STELLER. † Chærophyllum ſeminibus levibus nitidis, petiolis ramiferis ſimplicibus. LINN. Cliff. p. 101.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

137 Amongſt the medicinal plants we muſt mention the fol-
278 lowing: 1ſt, Kailoun, a plant which grows in all the ſwamps near the rivers. The inhabitants uſe this as a cataplaſm in all boils to make them ſuppurate; and taken in decoctions, they imagine it produces ſweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtſchatka*, they uſe in decoctions for all pains and ſwellings of the legs. 3dly, Katunatch †, or wild roſemary, is not ſo ſtrong as in other parts. The inhabitants have thought it beneficial in the venereal diſeaſe, but in this are deceived. 4thly, The ſea oak ‖ is thrown out by the waves; and being boiled with the ſweet herb, a decoction of it is given in fluxes. 5thly, The ſea raſberry is given to women in labour, to promote the birth. 6thly, There is yet another ſea plant, called yachanga ‡, which the ſea throws out near to the *Kurilſkaya Lopatka*, reſembling the whale's beard. This the inhabitants uſe in cholic pains, infuſing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almoſt all the ſhore of
757 *Kamtſchatka*. This plant is made uſe of againſt pains in the back in the following manner:---They put the patient into a hut made exceedingly warm; and when he begins to ſweat profuſely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occaſion ſudden death: however from this practice they
137 generally obtain great relief. 8thly, The zgate †† muſt not
278 be omitted, whoſe dreadful qualities are but too well known
411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is ſqueezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venoſis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The women, as was mentioned above, who desire to have children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs and different conjurations to prevent conception. Their superstition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES.

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

 certain

757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 757 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 844 278 The women uſe ſea raſberries ‡ to haſten their delivery; and alſo a ſort of coral, which they make into powder like crab-eyes, in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Empetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

decoction of the pentaphylladis fruticosus, and that not without success. To wounds they apply the bark of the cedar, and with this they pretend they can even extract arrows.

In costiveness they likewise drink the broth of their stinking fish, and in fluxes they eat lac lunæ, which is very common in this country. For the same distemper they likewise use meadow-sweet and tormentilla root.

Those who have sore throats use a decoction of the epilobium, which is also used by women in hard labours. When they are bit by a dog, or wolf, they lay the bruised leaves of the ulmaria upon the wound, drinking at the same time a decoction of them: this decoction they also admininister in the belly-ach and scurvy. The leaves and stalks bruised they use in burns. The decoction of this herb mixed with fish they use also in the tooth-ach; they hold it warm in their mouths, and lay a piece of the root upon the affected tooth. They use a species of gentian in the scurvy, and almost against every disorder. In the *French* disease they apply the chamaenchododendros, but seldom to any advantage: in fluxes they use the quercus marina: in swellings of the legs and scurvy, they drink a decoction of the dryas; and procure sleep by eating the seed of the ephedra. They foment their eyes with a decoction of seramus.

The inhabitants of the *Lopatka* use clysters, which probably they learned from the *Kurilles*: they prepare them from a decoction of different herbs, sometimes with fat and sometimes without: this they put into a seal's bladder, fastening to it any pipe which they can procure, and apply it in the common way: this medicine is in high esteem among them, and used in most distempers.

In the jaundice, they have a medicine, which they look upon as infallible. They take the roots of the iris sylvestris, and after cleaning them, beat them in warm water, and apply the juice, which they squeeze out, as a clyster, continuing it for

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

757/278 two days three times a day: this produces a purging, and generally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the loins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

764/775 THE burial of the dead, if one can call throwing them to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corps, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

000 consisted of myself, Mrs. Jochelson as assistant and physician to the party, and eleven laborers, of whom seven were Russians, three Kamchadals and one Japanese.

133 The Osernaya River, with its slanting bed, rocky banks, rapid falls and curves, forms a most difficult and dangerous route of travel. We had two boats and two canoes. One of the boats was for Mrs. Jochelson and myself; the other carried the tents, instruments, food and other supplies. The canoes served for reconnaissance and errands requiring despatch. It was very difficult to make progress on the turbulent river, particularly on the way up. Several times we had to disembark and carry our freight on our shoulders, while the boats were pulled by ropes through the rapids. (See Plate 5, figs. B, C.)

136 While there are no human habitations anywhere in the country, we were amazed to find well-beaten paths in the forests and on the mountains above the river, as if there were numerous human settlements. But realizing that these were roadways made by bears, we walked cautiously amid the dense vegetation with rifles ready for action. We did not see any bears while following these paths, but we heard the breaking and cracking of bushes and tree branches, and on the ground we found pieces of fresh salmon, the remnants of the bears' meals. The animals are very nervous and easily become alarmed. They have sufficient reason to be afraid of a man with a gun.

It is well known that at Lake Kuril and in its vicinity scores of bears are to be found. The abundance of fish and of many kinds of berries furnishes them ample food and favors their increase in number. The sparsity of human population is also favorable to the multiplication of the bears, although the few hunters of the coastal villages annually kill them by the hundreds.

133 After five days of painful effort we finally reached our destination. It was a windy day and our frail boats nearly capsized on the stormy lake, which is sur-
515 rounded by the peaks of extinct volcanoes and by steaming hot sulphurous springs,
757 the temperature of which reaches 100° C. (210° F.) and more. From our boat we observed steaming springs on the banks of the Osernaya when nearing the lake, but we had no time to stop to investigate them. We were told that the Kamchadal from Yavino and the Russians from Osernaya dig pits by the hot springs for bathing and curing different diseases. The temperature in these baths is reduced to 50° or 40° C.

136 From the head of the Osernaya River I directed my fleet to the Siwusk Cape (see map of Kuril Lake and Plate 5, fig. a). While excavating there we were entertained every day by the sight of bears fishing and gathering berries, particularly when we increased our field of observation by the use of opera glasses. The bears stood with their hind legs in the mountain rivers and creeks, and with their front paws managed to throw out on the banks the sea salmon, which in order to spawn ascend the rivulets that flow into the lake. The bears went after their prey and eating off the heads and spines, which are the most palatable parts of the fish, cast away the remainder. Their movements, turning, leaping and jumping, were so amusing that we could not restrain our laughter.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

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According to Krasheninnikoff the ancient Kamchadal had still another kind of summer dwelling, the superterrene grass lodge called bashabash. Unfortunately he does not state its shape—whether it was of a conical or hemispherical type. The bashabash was put up at the fishing places near the dwellings on piles and served chiefly as a place for cooking, which could not be done on the wooden platforms of the pile-dwellings.

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White clay, pieces of which were found in some of the excavations, was eaten by the Kamchadal, according to Krasheninnikoff (II, p. 180), as a remedy for diarrhœa. Bogoras relates (*The Chukchee*, p. 200) that the reindeer Chukchee, the Koryak and Lamut in Kamchatka, occasionally use as food a kind of white clay called by them nute-ecen (earth-fat). The Kamchadal called the white clay "earth sour cream." Sternberg tells (*The Gilyak*, p. 17) of a Gilyak favorite dish for treating guests, called moss, which consists of a mixture of the gluey broth of fish skins, seal's fat, berries, rice, and sometimes of minced dried fish, to which the solution of white clay is added.

It must be noted that the use of some kinds of clay as food is not limited to Siberia alone. The eating of edible clay has been observed among certain Guiana Indians,[1] Carib and Antillean islanders,[2] and among the people of Georgia and the Carolinas.[3] Deniker refers to many other places where the habit of eating certain earthy substances—kaolin, clay, limestone—has been observed. He calls this habit *Geophagy* and explains it by the need of supplying the needed mineral substances (calcareous or alkaline salts).[4]

[1] W. E. Roth, *An Introductory Study of the Arts, Craft and Customs of the Guiana Indians*, Annual Report of the Bureau of American Ethnology, 1924).

[2] William Sheldon, *Brief Account of the Caribs who Inhabited the Antilles*, Transactions of the American Antiquarian Society, I, 1820, pp. 365–435).

[3] Charlotte D. Gower, *The Northern and Southern Affiliations of Antillean Culture*, Memoirs of the American Anthropological Association, Number 35, 1927, p. 26.

[4] J. Deniker, *The Races of Man*, London, 1900, p. 145.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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The various conſtructions which M. Kaſloff ordered for the greater convenience of his eſtabliſhment, detained us two days longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of diſ-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

7: Lesseps T-3 (1787-88)1790 Kamchadal

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The ſmall pox, whoſe ravages I have already mentioned, appears not to be natural to the country, nor is it very common. Since the invaſion of the Ruſſians, and the frequent emigrations that ſucceeded it, this epidemical diſeaſe has only made its appearance in 1767 and 1768. It was then brought into the country by a Ruſſian veſſel bound to the Eaſtern iſlands, for the purpoſe of hunting otters, foxes, and other animals. The perſon, who had in his blood the fatal germ, was a ſailor from Okotſk, where he had taken remedies for the diſorder, previous to his departure; but the recent marks of it were viſible. Scarcely landed, he communicated this cruel malady to the poor Kamtſchadales, which carried off three fourths of them. As it has not appeared ſince, it is ſuppoſed that theſe people are not ſubject to it. In the year 1790 it broke out in the northern part of Kamtſchatka, but it did not ſpread ſo far as the

peninſula.

7:Lesseps T-3 (1787-88)1790 Kamchadal

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peninſula. It began at Anadirſkoi; it is not known how it was brought there, though the Ruſſians are alſo accuſed in this inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed births. Such as are deformed among them, have become ſo in conſequence of a conſiderable fall, though this is not a very common occurrence, as they are accuſtomed to fall from their balagans. They are but

7: Lesseps T-3 (1787-88)1790 Kamchadal

They ARE BUT
164 little ſubject to the ſcurvy; their uſe of
757 wild garlic, and various fruits and berries, is a preſervative. The Ruſſians and other ſettlers are more frequently afflicted with this diſeaſe.

Conſumptions are frequent enough; but boils, tumors, abſceſſes, and wens, are very common. They have no mode of curing them, but by inciſion or extirpation; and they uſe for theſe operations a knife, or perhaps ſimply a ſharp ſtone, which ſupplies the place of a lancet. Such inſtruments are calculated to impreſs us with no very high opinion of the ſkill of the operators; and it is obvious that the art of ſurgery, brought to ſuch perfection with us, is in a ſtate of the utmoſt barbariſm at Kamtſchatka.

178 Phyſic does not appear to have made a
756 greater progreſs; though it muſt be confeſſed

22: Guillemard T-2 (1882) 1886 Kamchadal

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between the hills, rises the snowy cone of Koriatska; and the storehouse of the Alaska Commercial Company, painted the dull Indian red that is so favourite a shade throughout Sweden, forms a pleasing patch of colour in the foreground. It did not take us long to make acquaintance with Petropaulovsky, in spite of its imposing name. The inhabitants, we found, called it Petropaulsk, and, in short, showed every disposition to make things easy for their visitors. Salmon and bilberries were sent off to us, and, on our remarking upon the presence of cows, a supply of cream and

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butter was not long in following. Society here is limited, the Europeans being but eight or ten in number. Mr. Lugobil, the local head of the Alaska Commercial Company, resides here, and superintends the shipping of the sealskins from Bering and Copper Islands; as does Captain Hunter, the cheery agent of Phillippeus and Company, another firm of fur-traders. Of stores (the American term is in use here) there are but two. One of them was owned by a kindly old Swede, who also acted in the capacity of Mayor. He had not visited his native land for thirty years, and it was evidently a source of the keenest pleasure to him to talk of it to one of us who knew it, and loved it almost as much as he did himself. The town is now no longer a military post, and the barracks and fortifications, razed to the ground by the English in 1855, have never been rebuilt. The entire authority is vested in the Ispravnik, whom, in spite of the exigencies of his profession, we did not find averse to the seductions of trade. A Russo-American Jew, better known as the King of Kamschatka, of whom the Russian Government was extremely anxious to get rid, completed, with Dr. Dybowski, the list of Europeans of the sterner sex. The ladies were only four in number.

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With Dr. Dybowski, who has acquired a European fame as a naturalist, it was a pleasure to make acquaintance. His life had been an eventful one. Imprisoned in Siberia for some time for taking part in the Polish insurrection, he had eventually been pardoned and made government doctor of Kamschatka, in which capacity he

22: Guillemard T-2 (1882) 1886 Kamchadal

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had visited the greater part of the peninsula. Owing to the difficulties of communication excepting in the winter season, he had abundant time on his hands, which he had devoted with indefatigable ardour to his favourite pursuits. Geology, surveying, palæontology, photography and ornithology,—each and all had occupied his leisure hours, with results which were evidenced by the richness of his collections. None of the other Europeans knew anything of the country outside Petropaulovsky, and to him alone we were indebted for what information we could get about our projected route, as well as for many useful hints on Kamschatkan travel.

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Our intention was, if the plan were feasible, to travel northwards from Avatcha Bay until we struck the head waters of the Great Kamschatka River, where we were to procure canoes if possible, or if not to construct rafts, and by this means float down the stream to the sea. Meanwhile, the yacht was to remain in Petropaulovsky harbour for a month or six weeks, and then proceed to the mouth of the river to await our arrival. We found that Dr. Dybowski, in spite of his extensive travels in the peninsula, had not himself performed this journey, neither was he aware of any other person who had attempted it. Communication often takes place with Nischni Kamschatka—an *ostrog* near the mouth of the river—in the winter, but the sledges do not, as in Lapland, travel on the river; and though occasionally a few of the lonely settlements upon its banks are passed, the track leads for the most part by short cuts overland, and we had no means of judging the distances or the length of time necessary for our journey. From Dr. Dybowski, however, we were able to obtain all the information that was to be got upon the subject; and to learn that, whatever other difficulties we might have to encounter, that of an insufficient supply of food was certainly not one. His accounts of the really marvellous abundance of fish, which at the time seemed almost incredible, we were destined later to find, if anything, understated. Whether the almost exclusive fish diet of the inhabitants of the

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22: Guillemard T-2 (1882) 1886 Kamchadal

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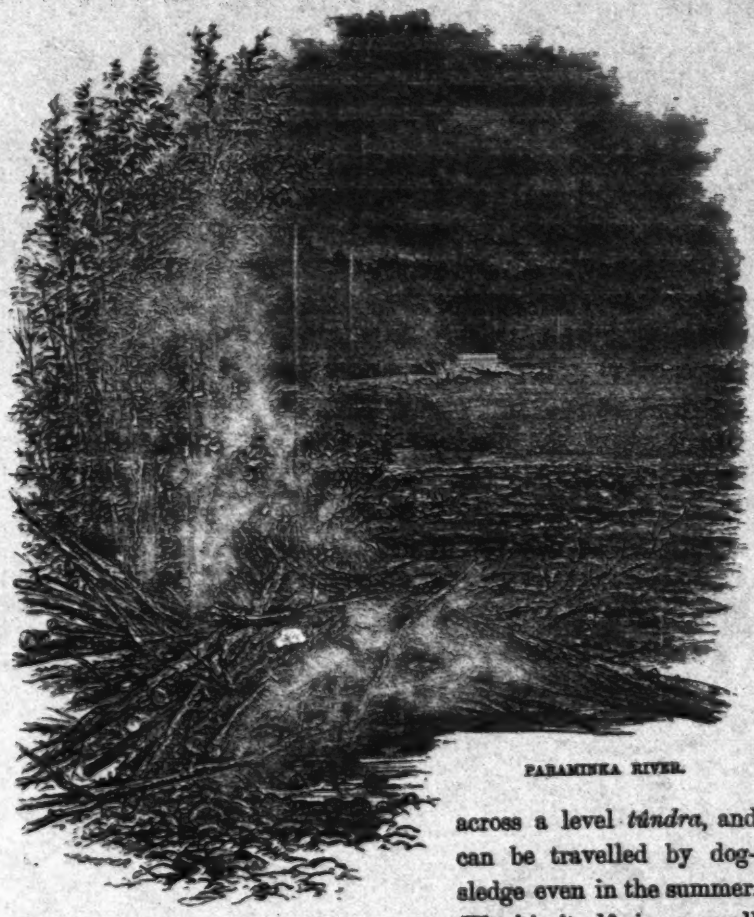
picturesque lake, across which we were conveyed in dug-out canoes to a small village on the opposite shore. From here the road lies



PARAMINKA RIVER.

across a level *tundra*, and can be travelled by dog-sledge even in the summer. Kluchi itself is a small village composed of a few log-built huts and balagans, but, with its background of the Vilutchinska volcano, is prettily situated. It stands in an open valley, in which some attempts at cultivation are made. The hot springs—the steam from which is visible at some

22: Guillemard T-2 (1882) 1886 Kamchadal

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distance—have a temperature of about 108° Fahr., and appear to be nearly devoid of sulphur. They are much resorted to by the natives for cutaneous and other disorders, and have huts built over them for bathing purposes, thanks to the orders of the Ispravnik. Near the village runs a branch of the Avatcha River, down which our party paddled to the sea; and on arriving at the yacht we were pleased to learn that most of the horses had been brought into the settlement, and that there was every prospect of our starting on our long-planned expedition through the interior in the course of a couple of days.

22: Guillemard T-2 (1882) 1886 Kamchadal

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of them were clothed in leather breeches and the boots I have already described, with the ordinary loose blue shirt of the Russian peasant, but some had already commenced to wear the *parka*. These are not all of reindeer, which is not a common animal except among the Koriaks, but are also made of bear and dog fur, although the dogs are not grown for the purpose, as is the case in Lapland.

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If leprosy be in any way connected with a diet in which fish is one of the chief constituents, as is by some supposed to be the case, in no country in the world should it be more prevalent than in Kamschatka. Dr. Dybowski had assured me that it was very common, and had shown me photographs in which the expression of the disorder appeared identical with that unfortunately so frequent in Norway. But the only case which came under our notice was at this place, and since the sufferers do not appear to be secluded in any way, it is only fair to conclude that, in the interior of the country at least, the disease cannot be very prevalent. Syphilis is, unhappily, very general, but its effects are now far less terrible than on its first introduction.

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We paddled merrily down stream in spite of the still unsettled arguments as to the price we were to pay our men. Below Mashura the pines become more numerous, and the perpendicular mud cliffs are a characteristic feature of the river. Beneath these we found the depth of the stream to be often as much as eighteen or twenty feet, but the mean depth is probably not more than half as great. Huge piles of driftwood block the banks of every low promontory, and testify to the enormous force and volume of the stream upon the breaking up of the ice,—a phenomenon which can dimly be realised from the wonderfully graphic description of Mr. Seebohm in his "Siberia in Asia." Owing to the increased depth of the water, snags became less frequent and navigation easier; but the size of our rafts prevented us from making more than five versts an hour, a rate that our log, frequently heaved and with corrections applied for the current, told us to be fairly constant.

Hitherto we had been able with the greatest ease to shoot as

24: Lansdell--635-636 M-2 (1879) 1882 Kamchadal
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"About 50 miles west of Petropavlovsk is a remarkable warm spring, into which when you enter, says Mr. Collins, the sensation is as if the skin would be [636] removed, whilst the stones and mud on the bottom fairly burn the feet, added to which the steam and gas, ascending from this natural caldron, fairly take away the breath. In a short time, however, bathers become red like lobsters, and find the temparature enjoyable. The water is very buoyant. It is used by the natives for all sorts of deseases."

27: Sauer--304-305 T-2 (1789-93) 1802 Kamchadal
116, 133, 757

"At the distance of 12 versts from the village of Paratounca, in a direction north-west, is the discharge of a deep rivulet of warm water, called Klutshevoia, navigable for canoes three versts up-[305]wards. It springs from several hot water lakes in an extensive plain; one of which lakes is about 100 fathoms long, and 7 fathoms wide; very convenient for bathing near the shore, but the middle very deep, and extremely hot. About 20 fathoms from this is another, about 5 fathoms by 7, but excessively hot: a body of boiling water issues through a square hole in a stone at the eastern extremity; and it has a run into a cold water spring, so narrow, that you may stand with one foot in each. Ulcers, old and fresh wounds, are reputed to heal from bathing in this water. I used it for tea, but the flavour was not very agreeable, being something like that of alum. The hot springs of Shumatshik are situated 90 versts north of the bay of Avatsha, and flow into Kronotskoi Bay. There are several others, but of no note."

22: Guillemard T-2 (1882) 1886 Kamchadal

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country has any connection or not with the leprosy prevalent among them, it is difficult to say. Our informant described it as being a common disease, and he must have had considerable opportunities of judging, but it is remarkable that during our journey through the country we met with but one solitary case. Scurvy was, we were told, uncommon, owing no doubt to the abundance of the wild garlic and the *sarana*—a liliaceous plant whose bulb is stored for the winter, and supplies the place of the potato. This latter vegetable has, however, become much more extensively cultivated of late years.

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It was a matter of great regret to us that our acquaintance with Dr. Dybowski should of necessity have been so limited. He was on the eve of a long journey in search of fossils to the Kuril Lake, which lies in an almost unknown region at the southern extremity of the peninsula. It was by such pursuits alone that he was able to mitigate the loneliness of what was, in reality, an exile. During the winter he travelled over the country to such isolated spots of it as are inhabited, and saw his patients. These he was supposed to supply with such medicine as would suffice for their cure, or last them, should they be incurables, until the time of his visit in the following year! It is not every parish doctor whose district is spread over the extent of one hundred thousand square miles!

During the week that was necessary for the completion of our preparations we had abundant time for the exploration of Petropaulovsky and its surroundings. The numerous harbours and lovely scenery of Avatcha Bay would take a month to become thoroughly acquainted with, and it would be hard to imagine a more charming place for the naturalist and sportsman. Possibly, when the salmon rivers of Norway have reached a prohibitory price, and the game of India and South Africa has disappeared, some adventurous individual will recommend Kamschatka as a new field for sportsmen. At present, it must be confessed, it is not very easy to get there. Every year the port is visited by a

29:Cochrane T-2 (1821-22)1824 Kamchadal

758 are doctors. Having refreshed myself, I proceeded
R to examine the hospitals and baths, all of which I
177 found in a disgraceful state of filthiness and decay.
75 There are two hospitals, one for the Kamtchatdales and a smaller one for the accommodation of the officers. There are also two baths, both ill contrived, and in want of every necessary and convenience which persons who have recourse to them require. The hospitals are without medicines, and the baths without flannel gowns, blankets, sheets, or towels; nor is there even a warm passage for the patient from the bath to the hospital; he must come from a place, where the atmosphere is equal to 25° of heat, and pass through a current of air where there may be 15° or 20° of frost. There never was a place where more could and ought to be, or where so little has been, done for the benefit of so wretched a people. The late chief doctor was five years in the command of this hospital, during which period he did nothing but keep his patients increasing in disease; indeed it may be considered a fortunate circumstance for the Kamtchatdales, that the governor was obliged to send him as surgeon of Captain Vassilieff's ship, in lieu of the proper surgeon who remained behind at sick quarters. Not even the most common vegetables have been raised; and but for a few cows, the benevolent present of Captain Rikord, the chief, I hardly know what there would be of the really useful for this establishment, which certainly owes

29:Cochrane T-2 (1821-22) 1824 Kamchadal

758 nothing either to the industry or humanity of the
R doctor before alluded to.

177 The state of some of those miserable creatures
.75 whom I saw in the hospital, was such as absolutely to prevent the doctor from dressing their wounds; of course I am incapable of describing them. They are allowed by the Emperor one pound of bread and half a pound of meat per day. They have also fish in abundance, and wild berries are to be found every where round the place. The patients, being all afflicted with one disease, are cramped up into one small space, never to go out but at their own desire, nor do any work, though they might raise an unlimited quantity of vegetables from the grounds covered with the warm vapour. In short, instead of being as it is, a place calculated to engender and nourish disease almost to pestilence, it might be, at a trifling expense and with proper care on the part of the head doctor, one of the most humane and efficient establishments on the face of the globe.

312 With respect to the nature and quality of the baths, they had a strong smell of sulphur, and an unpleasant taste. The hot and cold springs are united at the baths, and it is a strange circumstance, that the one should always be boiling hot in 25° of frost, while the other at 30° of heat is always below the freezing point. These were the only remarks my short stay, in the month of December, could enable me to make. I should, how-

29:Cochrane T-2 (1821-22)1824 Kamchadal

I should how-
758 ever, in justice observe, that the present head doc-
R tor, if it be Mr. Gramatin, who was my shipmate in
177 the transport from Okotsk, is a man of great talents,
.75 perseverance, and industry; and had, previous to my leaving the Peninsula, seven months after my arrival and visit to the hospital, cleared the place of three-fourths of the patients, and sent them to their homes quite cured. He had no remedy but surgical operations, and succeeded in first putting the patient to sleep, and then cutting out all the afflicted parts. To the truth of this statement, extraordinary as it will doubtles appear in Russia, I beg leave to add the attestation of Dr. Zaerzerfskey, who was with me at the hospital at the time to which I allude.

000 My route from Malka to St. Peter and St. Paul's was over a highly picturesque valley, and in beautiful weather. I soon reached Nachikin and Koraki, and, changing dogs, proceeded very pleasantly till midnight damped our satisfaction a little with a fall of snow. We halted to refresh the dogs, and lay down till the peep of dawn enabled us to proceed, and we reached Avatcha by noon. But no dogs were to be procured there except three which carried my little baggage; I therefore proceeded on foot, and reached the haven at about three o'clock. My entry, alone and unperceived, was widely different from my departure:—my sensations were correspondent. In melancholy mood, leaving my betrothed for the sake of wandering

29:Cochrane T-2(1821-22)1824 Kamchadal

231 R 177 .23

ple, were they once imported upon a large scale. The dogs, like the aborigines, are on the decline, and probably twenty or thirty years more will leave nothing in Kamtchatka but the Russians and animals of the chase. When it is recollected that Kamtchatka has such magnificent and extensive meadows, and that the climate is not severe; and when it is considered with what facility government might send each year two or three hundred head of young cattle by the annual transports to Tygil, it may be naturally supposed that the different chiefs have been attending more to their personal concerns than to those of the peninsula. That the place might be made even to flourish, there can be no reasonable doubt.

651 R 177 .65

The expenses of the colony have been very great to Russia, and must continue so, as long as the present plan is persisted in. The yasack amounts to a less sum of money than the single maintenance of a chief. Five hundred heads of foxes or sables, worth six thousand roubles, or three hundred pounds, is the amount; while the expences of the colony cannot fall short of two hundred thousand roubles, or ten thousand pounds.

164 758 R 177 .75

The depopulated state of this peninsula is also to be attributed to other causes. Their continual wars and insurrections greatly thinned them, and these were followed by the introduction of the small-pox, which in the year 1768, carried off no less than six thousand persons; and twenty thousand are sup-

29:Cochrane T-2 (1821-22)1824 Kamchadal

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posed to have fallen victims to it within a short period. Yet at this moment there is a want of vaccinating matter, nor is it a questionable assertion that the quality of medicines in the hospitals is shamefully adulterated, and the quantity small. The present worthy chief has however caused an inquiry to be made upon this subject, and the result has been transmitted to government. But it is not the small pox alone, that the arrival of the Russians introduced into this place; the distemper before alluded to has made, and continues to make, most dreadful ravages in every part of the peninsula, very few families being free from the taint, and no part of the world can show more miserable objects of its fury. The whole race indeed look like beings better qualified to extinguish than propagate the human species; nor is this surprising, considering their present state, almost without hospitals, medicines, or attendants, save that ill-managed house at Malka.

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Besides these two diseases, the inhabitants of Kamtchatka are subject to all those which make havoc in countries where the people are ordinarily ill fed, ill clothed, and liable to famine. The last has frequently visited this Peninsula, more from a want of people than of food; for fish is not always to be had upon both sides of the Peninsula at the same time, and they have not the means of transporting the superabundant quantity to the opposite coast.

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

5: Jochelson A-5 (1910-11) 1928 Kamchadal

175 sheretsk, and everywhere the Russians were slain. It so happened, however, that the *Gabriel* unexpectedly returned on account of an impending storm, not
669 being prepared for a sea-voyage; and besides the crew were not eager to go to Anadyr. The sudden return of the *Gabriel* saved the Russians of the Peninsula.
R. With the assistance of the sailors, Verkhne-Kamchatsk and Bolsheretsk were
177.66 successfully held; Nishne-Kamchatsk was recaptured and the revolt was suppressed.

When the news of the revolt and its suppression reached Yakutsk the Administration resolved to send a commission to Kamchatka to investigate the cause of the uprising and the revolts of the Cossacks against their chiefs. At the head of the commission were Majors Mekhlin and Pavlutzky, former lieutenants of Shestakoff. The investigation lasted from 1733 to 1739. Sentences of death were passed by the commissioners on several Kamchadal chiefs and other instigators of the uprising, as well as on Cossacks convicted of criminal actions. Among the Russians executed was the Cossack officer Stinnikov, who in 1729 ordered the killing of the Japanese and robbed their ship, which was carried by the winds to the southern shores of Kamchatka.

SOME MENTAL TRAITS OF THE OLD KAMCHADAL

157 The old Kamchadal were proud, independent, inclined to wrath; their passions were easily aroused; they took offense readily and tried to avenge themselves by
761 any possible means. They had no fear of death and could not be frightened. In order to demonstrate the psychology of the old Kamchadal some historical instances are cited of the relations between the Russians and Kamchadal before the final pacification of the latter.

651 In the winter of 1712 the Chief Antsyferoff with 25 Cossacks endeavored to collect tribute from the Avacha Kamchadal near where the fortress of Petropav-
669 lovsk was subsequently established. The Avacha Kamchadal were informed of the imminent arrival of the collectors. They built a solid blockhouse on posts
R. with secretly lifting doors.[1] The Russians were met with simulated pleasure.
177.65 Amidst mutual professions of friendship the transactions began, the Kamchadal readily surrendering a number of their principal men as hostages for their good behavior. At night they retired with the Cossacks to the pile-dwelling for sleep. But the natives planned to burn the building in the night and with it all the inmates. Their own men, however, were to escape through a secret passageway. But after the pile-dwelling was fired, they learned to their horror that their hostages had been chained by the Cossacks so that escape was impossible. The hostages, however, pleaded with their kinsmen outside to let the holocaust go on if, by perishing themselves, they could secure the destruction of the enemy, and so all in the building perished together.

669 Among the Kamchadal leaders of the revolt was the chief of Yelovka River, a
761 tributary of the Kamchatka River, Tighil by name. When Nishne-Kamchatsk

[1] The old Kamchadal usually used such dwellings on platforms raised on piles as summer houses and also as storehouses.

669 was taken by the Russians, Tighil escaped to his fortified settlement in the mountains of Yelovka. Being pursued and overtaken by the Russians, he slaughtered
● 761 his wives, children, kinsmen and dogs and killed himself.

One of the chiefs, sentenced to death as an instigator of the uprising, laughingly complained before the execution that he had the ill-luck to be hanged the last.

157 The present Kamchadal, however, have completely changed their psychology. They have a pitiful and humble appearance, and carry out each and every order
177 of the Cossacks and the Russians in general. Evidently the process of Russianization, combined with two centuries of oppression by the Russian authorities, has
181 brought about this change in the primitive character of the Kamchadal. This change, however, did not take place suddenly, but the tense energy of the people displayed in the general uprising was broken, never to recover. They became pacified.

THE YASSAK OR FUR TRIBUTE

651 The Kamchadal rebellions were chiefly caused by the extortionate demands made by the Cossacks and officials for furs and services for themselves. According
R. to Krasheninnikoff[1] the Empress Elizabeth, after the general rebellion was crushed,
177.65 issued an order limiting the yassak to one skin to a hunter of what ever animal he could bring; other historians of Siberia state it differently. The main factor attracting the Russians to Siberia in the early period of settlement was its wealth in furs. For one time furs were an important financial item in the budget of the Russian Empire; in the beginning of the seventeenth century the Treasury monopolized the fur trade. Czar Boris Godunoff decreed that the hunters and fur-traders deposit their merchandise in the Treasury for a fixed remuneration. The accumulated furs were placed in the care of a special department in Moscow, which disposed of them through its agents in Turkey, Persia, Bokhara and later in China. China in time became the largest and most profitable consumer of Siberian furs, for in exchange for its furs the Treasury would import from China gold and silver with which the Moscowite Empire paid for its wars. The China trade continued to be a Government monopoly until 1762. In that year Empress Catherine II abolished the official caravans to Peking, leaving the trade, which was still based chiefly on furs, in the hands of private merchants. The free fur trade had a stimulating effect on the development of commercial relations between Siberia, European Russia and the neighboring countries. The Treasury on the other hand no longer insisted that the tribute of Siberia be paid in furs exclusively. They were now free to pay their tribute in money, the amount being approximately estimated according to the value of the furs. Thus the field for official abuses was reduced, and the attitude of the natives toward the Russians began to improve.

Attempts to subject the Kamchadal coincides with the period of the Government monopoly in furs, when fur tribute was the cause for which thousands of men were tortured and killed whenever they refused or were not able to satisfy the rapaciousness of the foreign invaders. The situation of the Kamchadal was

[1] Krasheninnikoff, part II, p. 387.

7:Lesseps T-3 (1787-88)1790 Kamchadal

761 posed the man is not always the conqueror;
224 but this does not prevent the inhabitants of this country from daily exposing their lives; the frequent examples of the death of their countrymen has no effect upon them: indeed they never go out, without considering before hand that it is either to conquer or to die; and this severe alternatiue neither stops nor terrifies them*.

224 They hunt other animals nearly in the same manner, such as rein deer, argali, or wild sheep, called in Russia *diki-barani*,

* They hunt the bear in this manner in every season of the year, except when the country is covered with snow; their method is then different. It is known that in winter the bear retreats to the den which he has fabricated during summer of the branches of trees; he continues there while the frost lasts, either asleep, or licking his paws. The Kamtschadales pursue him in their sledges, and attack him with their dogs, who oblige him to defend himself: he rushes from his lurking place to certain death; if he refuse to come out, his fate is equally certain, and he is crushed to death under the ruins of his den.

foxes,

142 punishment. Although in outward appearance they resemble the other inhabitants of *Siberia*, yet the *Kamtschadales* differ in this, that their faces are not so long as the other *Siberians*', their cheeks stand more out, their teeth are thick, their mouth large, their stature middling, and their shoulders broad, particularly those people who inhabit the sea coast.

515 Their manner of living is slovenly to the last degree; they never
302 wash their hands nor face, nor cut their nails; they eat out of the
264 same dish with the dogs, which they never wash; every thing about them stinks of fish; they never comb their heads, but both men and women plait their hair in two locks, binding the ends with small ropes: when any hair starts out, they sow it with threads to make it lie close; by this means they have such a quantity of lice that they can scrape them off by handfuls, and they are nasty enough even to eat them. Those that have not natural hair sufficient wear false locks, sometimes as much as weigh ten pounds, which makes their heads look like a hay-cock.

762 They have extraordinary notions of God, of sins, and good
181 actions. Their chief happiness consists in idleness and satisfying
517 their natural lusts and appetites; these incline them to singing,
554 dancing, and relating of love stories Their greatest unhappiness
157 or trouble is the want of these amusements: they shun this by all methods, even at the hazard of their lives, for they think it more eligible to die than to lead a life that is disagreeable to them; which opinion frequently leads them to self-murder. This was so common after the conquest, that the *Russians* had great difficulty to put a stop to it. They are chiefly employed in providing what is absolutely necessary for the present, and take no care for the future. They have no notion of riches, fame, or honour; therefore covetousness, ambition, and pride, are unknown
578 among them. On the other hand, they are careless, lustful, and cruel: these vices occasion frequent quarrels and wars among them sometimes

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

village to demand their tribute, they were received with all marks of friendſhip, and not only the tribute was paid, but likewiſe great preſents were made them. Thus the natives having lulled them into a ſtate of ſecurity, they either cut their throats in the night-time, or ſet fire to their huts, and burnt them with all the Coſſacks which were within. By ſuch ſtratagems 70 people were deſtroyed in two places, which, conſidering the ſmall number of Coſſacks that were there, was a very conſiderable loſs: nay, it has ſometimes happened that when they had no opportunity of deſtroying the Coſſacks at firſt, they have for two years quietly paid the tribute, waiting 'till they could find an opportunity of doing it.

By this cunning the *Kamtſchadales* deſtroyed at firſt many Coſſacks, but now the latter are more upon their guard, and are particularly afraid of extraordinary careſſes, always expecting ſome bad intention when the women in the night-time retire out of their huts. When the *Kamtſchadales* pretend to have dreamed of dead people, or go to viſit diſtant villages, there is reaſon to dread a general inſurrection.

When this happens, they kill all the Coſſacks which fall in their way, and even the *Kamtſchadales* who will not join in the rebellion. As ſoon as they hear that troops are coming againſt them, inſtead of going to oppoſe their enemies, they retire to ſome high place, which they fortify as ſtrongly as they can, and building huts there, wait 'till they are attacked, and then they bravely defend themſelves with their bows and arrows, and every other method they can think of; but if they obſerve, that the enemy is likely to make themſelves maſters of the fortreſs, they firſt cut the throats of their wives and children, and afterwards either throw themſelves down the precipice, or with their arms ruſh in upon their enemies that they

726 may not dye unrevenged: this they call making a bed for them-
762 selves. In the year 1740, a girl was brought from *Utkolok* whom the rebels in their hurry neglected to kill; the rest were all murthered, and the rebels threw themselves from the hill, upon which they were fortified, into the sea.

669 From the time that *Kamtschatska* was subdued, there have
726 been only two rebellions which could be properly called so. The
175 first happened in the year 1710, in *Bolscheretskoi Ostrog*; and
R. the other in the year 1713 upon the river *Awatscha*. Both
177 of them were, however, unfortunate for the authors. In the
.72 first, great numbers besieged the *Bolcheretskoi* fort, in which were only 70 Cossacks, 35 of whom making a sally put them all to flight, and in endeavouring to reach their boats which brought them thither, in the hurry such numbers were drowned that the river was almost choaked up by their dead bodies. The rebels upon the *Awatscha* thought themselves so sure of destroying the *Russians* that they brought thongs to bind them; however the rebels were either all killed or taken prisoners.

411 Their arms are bows and arrows, spears, and a coat of mail: their quivers are made of the wood of the larch-tree, glued round with birch-bark; their bow-strings of the blood vessels of the whale; and their arrows are commonly about four feet long, pointed with flint stones, or bone; and though they are but indifferent, yet they are very dangerous, being all poisoned, so that a person wounded by them generally dies in twenty-four hours, unless the poison be sucked out, which is the only remedy known. Their spears are likewise pointed with flint or bone; and their coats of mail are made of mats, or of the skins of seals and sea horses, which they cut out into thongs, and plait together. They put them on upon the left side, and tie them with thongs upon the right; behind is fixed a high board to defend their head, and another before to guard the breast.

When

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

757/775 two days three times a day: this produces a purging, and generally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the joins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

764/775 THE burial of the dead, if one can call throwing them to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corpe, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

near the hut, that evil ſpirits, whom they imagine to be the occaſion of their death, ſeeing the dead body, may be ſatisfied with the miſchief they have done. However, they frequently remove to ſome other place, when any one has died in the hut, without dragging the corps along with them. 764 775 768

They throw away all the cloaths of the deceaſed, not becauſe they imagine they ſhall have occaſion for them in the other world, but becauſe they believe that whoever wears the cloaths of one that is dead will certainly come to an untimely end. This ſuperſtition prevails particularly among the *Kuriles* of the *Lopatka*, who would not touch any thing which they thought had belonged to a dead perſon, although they ſhould have the greateſt inclination for it. The Coſſacks make uſe of this ſuperſtition to prevent one another ſometimes from ſelling ready-made cloaths, by aſſuring the buyer that they belonged to a dead perſon. 784

After the burial of the dead they uſe the following purification: Going to the wood they cut ſome rods, of which they make a ring; and creeping through it twice, they carry it to the wood, and throw it towards the weſt. Thoſe who dragged out the body are obliged to catch two birds of one ſort or other; one of which they burn, and eat the other with the whole family. The purification is performed on the ſame day; for before that they dare not enter any other hut, nor will any body elſe enter their's. In commemoration of the dead, the whole family dine upon a fiſh, the fins of which they burn in the fire.[1] 764

1. [Chapter XX. which discusses the three Kamchadal dialects was not translated "as they are very unintelligible to an English reader." Chapter XXI is in the Koryak File as Source 23.]

CHAP

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	5.4	1,485 mm.	4.8
Length of head	188 mm.	6.8	183 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.9
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 The Kamchadal, prior to embracing Christianity, threw away their dead to
● 764 be devoured by dogs, and therefore no skeletal remains were found while excavat-
172 ing prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 The Russian conquerors have exercised a disintegrating influence on the
177 family life of the Kamchadal. Among the Kamchadal, unchastity has been more
836 or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought
732 by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 These observations refer to the year 1911 and it would be fair to relate obser-
177 vations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

6. Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[1776] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

The central figure of Itel'men mythology was the raven-creator, Kutkh.
[1793] But he was not held in esteem, and various comical and obscene stories were told about him.

[1764] The bodies of dead adults were given to the dogs to eat; children were
[1756] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

In the middle of the 18th century, the Itel'mens were converted to
[1799] Christianity, but they continued to cling to their animistic ideas.

Information about the abundance of fur on Kamchatka received from Luka
175 Morozko and Atlasov attracted the attention of the tsarist government and
648 the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

The quelling of rebellions by armed force and the arbitrary rule of the
[161] local officials reduced the Itel'men population. But the principal reason
[1731] for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[1728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

The system of tax collection through the village elders and the develop-
175 ment of barter with Russians resulted in the accumulation of private prop-
648 erty in the hands of some individuals. As early as the 1730's, there were
556 toyons (elders) who lent sables to their kinsmen to enable them to pay their
426 tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[1766] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

near the hut, that evil ſpirits, whom they imagine to be the occaſion of their death, ſeeing the dead body, may be ſatisfied with the miſchief they have done. However, they frequently remove to ſome other place, when any one has died in the hut, without dragging the corps along with them. 764 775 768

They throw away all the cloaths of the deceaſed, not becauſe they imagine they ſhall have occaſion for them in the other world, but becauſe they believe that whoever wears the cloaths of one that is dead will certainly come to an untimely end. This ſuperſtition prevails particularly among the *Kuriles* of the *Lopatka*, who would not touch any thing which they thought had belonged to a dead perſon, although they ſhould have the greateſt inclination for it. The Coſſacks make uſe of this ſuperſtition to prevent one another ſometimes from ſelling ready-made cloaths, by aſſuring the buyer that they belonged to a dead perſon. 784

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1. [Chapter XX, which discusses the three Kamchadal dialects was not translated "as they are very unintelligible to an English reader." Chapter XXI is in the Koryak File as Source 23.]

CHAP

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 583
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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Village, 18th-century engraving.

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At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semichugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed. [554] [614] [342] [592]

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens. [562] [591] [583] [182] [721] [648]

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest [171] [796]

7:Lesseps T-3 (1787-88)1790 Kamchadal

278/825 this induced them to make uſe of it. This animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177/771/793 The Chriſtian religion was introduced into this country by the Ruſſians; but the inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 upon the clergy, whose business it is to en-
771 lighten their ignorance. But are these cle-
793 rical missionaries sufficiently informed themselves? They have no opportunity it must be acknowledged for profound study, and probably it is not required of them, as it is common enough to see a Kamtschadale admitted to this dignified office.

177 These popes are all under the authority
793 of a protapope, or high priest, resident at Nijenei, and he again is subordinate to the archbishop of Irkoutsk, who alone ordains and appoints the clergy to their cures, so that they are all obliged to resort to this settlement. The length and perils of the journey are considered perhaps as a kind of initiation; and without any other merit or examination, they probably receive holy orders: it is certain they return neither wiser nor better. These divines are then sent to their places of destination; the time

22: Guillemard T-2 (1882) 1886 Kamchadal

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century.
771 The latter people are now rare as a pure race, excepting upon the
793 western side of the peninsula. The Gunalians are all Christians, and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

113, 773 RY3 Kamchadal RY3

(For complete translated texts of Kamchadal myths see 1: Jochelson, RY4 Koryak, category 116, pp. 327-340.)

343 their victuals and clean their fish in bad weather; and the Cossacks boil their salt from sea water in them. The villages, which
361 are well inhabited, having their common huts surrounded with these balagans, make a very agreeable appearance at a distance.

The southern *Kamtschadales* commonly build their villages in thick woods, and other places which are naturally strong, not less than twenty versts from the sea; and their summer habitations are near the mouths of their rivers; but those who live upon the *Penschinska* sea and the Eastern Ocean build their villages very near the shore.

278 They look upon that river near which their village is situated,
621 as the inheritance of their tribe; and if one or two families at
423 any time desire to live separate from their native village, they build themselves huts upon the same river, or some branch that
614 falls into it; from which it is natural to imagine, that the inhabitants of every village have originally sprung from the same father; and the *Kamtschadales* themselves say, that *Kut*, whom they sometimes call God, and sometimes their first father, lived two years upon each river, and left the children that river, on which they were born, for their proper inheritance; and though formerly the *Kamtschadales* used only to hunt and fish upon their own rivers, they now wander above 200 versts to kill the sea animals upon the *Awatscha*, or the *Kurilskaya Lopatka*.

CHAP.

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[1716] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[1793] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[1764] The bodies of dead adults were given to the dogs to eat; children were
[1756] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[1799] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[1731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[1728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
556 erty in the hands of some individuals. As early as the 1730's, there were
426 toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 The economic condition of the Itel'mens did not improve in the latter half
648 of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

I: Jochelson E-5 (1900-01) 1908 RY4 Koryak
Kamchadal / RY3

XIV. — TALES OF THE KAMCHADAL.

Villages of Tighi'l, U'tkholoka, Ka'vran, and Seda'uka.

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131. Kutq and his Wife.*

It was in the time when Raven (Kutq) and his wife were living. Once upon a time he asked her to go with him to gather eggs. Raven's wife attached a bullock to her sledge, and started on the journey. The old man went afoot. The old woman drove her bullock for some time, when a Hare ran across the trail, and said to her, "O granny! let me have a place on your little sledge." — "Where shall I put you? You will break my little sledge." — "If you will not give me a place, I shall eat you some day." Then she let him get on, and said, "Sit down here at the back."

They went on, and met a Fox. "O granny! where are you going?" — "I am going to look for eggs." — "Let me sit down on your sledge, granny." — "Where shall I put you? You will break my little sledge." — "If you do not let me sit down, I shall eat you." — "Well, then, take your place here on the runner."

After that they met a Wolf. "Where are you going, granny?" — "We are going to look for eggs." — "Take me with you, granny." — "How can I take you? You will break my little sledge." — "If you do not take me, I shall eat you." — "Well, then, take your seat here in the front."

After that they met a Bear. "Take me with you, granny." — "How can I take you? You will break my sledge." — "If you do not take me, I shall eat you." — "Well, then, sit down in front, on the curved shaft."

They proceeded, and after a while the sledge broke down. The old woman began to cry. Then she sent the Hare for a good straight stick to replace the broken runner; but the Hare brought only a few willow-twigs. "Oh, you crazy thing! — Fox, you bring a new runner!" The Fox brought her only a few thin, half-broken boughs. The old woman grew angry, and sent the Wolf; but he brought an old piece of half-rotten aspen. Then she scolded the Wolf, and sent the Bear; but he brought a tree-trunk all hollow within.

Much as the old woman was averse to leaving her bullock, she had to go herself. While she was away, the Wolf and the Bear killed the bullock, and taking off the skin whole, without a cut in the abdomen, filled it with

773 moss and leaves. They ate the meat themselves, and put the bullock in its
539 place, as if it were alive.

The old woman came back with the runner, and found all the animals gone, which pleased her greatly. She mended her sledge, sat down, and urged the bullock; but after she had struck it a few times, it fell down. The old woman jumped down and hurried to the bullock. Behold! there was only the skin filled with moss and grass: all the flesh was gone. The old woman began to cry, "Oh, the bad Bear! He killed my poor bullock."

She walked on in search of the old man. At last she found him on the shore of the lake. He had gathered plenty of eggs, and had eaten them all. "Oh!" said the old woman, "the Bear and the Wolf have eaten my bullock. I feel very unhappy. Give me at least an egg or two." — "Leave me alone!" said the old man. "I have not yet eaten my fill."

The old woman grew angry, and went to look for eggs herself. After a few moments she exclaimed, "Oho! I have found an egg." — "Whose egg is it?" asked the old man. "It is a swan's egg." — "Then it is a very big one," said the old man.

The next moment he exclaimed, "I have found an egg!" — "Whose egg is it?" — "An egg of a snow-bunting." — "Then it is a very small one."

After a while the old woman cried again, "I have found an egg!" — "Whose egg is it?" — "An egg of a black goose." — "Then it is a very big one."

Then the old man exclaimed, "I have found an egg!" — "Whose egg is it?" — "An egg of a woodpecker." — "Then it is a very small one."

"Well," said the old woman, "let us boil our eggs I am hungry." They dug some small round holes in the ground, put their eggs into them, and started a small fire all around the holes. They did this because they had no cooking-vessels. Then the old woman said to her husband, "Give me some of yours. Your eggs are small, I am sure they are done already." The old man refused. "Leave me alone!" he said. "You have eggs of your own, which are large enough."

Out of spite the old woman trampled on his eggs, and smashed them all. Raven cried; but the old woman took her eggs out of the hole, and ate them. Raven cried still louder, and asked her for some; but she gave him nothing, and ate all the eggs herself. Then she said, "Now, let us go home. Probably our children are crying for us."

She ran ahead, and found a small hut standing near their trail. She threw herself down on the floor, turned into a small child, and cried like a real baby. The old man came to the hut, and, hearing the cries of the child, pitied it, and took it in his arms. He soothed and rocked the baby, but it only cried the louder. "Give me water," it said: "I am thirsty." The old man gave it some water. "I do not want water! Give me some cold tea."

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak [Kamchadal RY3

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The old man gave it some cold tea; but the child cried, "I do not want tea! Give me the lamp." In this manner the old woman fooled and worried her husband until he put the baby down. "Oh, you fretful thing!" he exclaimed. "I don't blame those who left you here alone by yourself." Then he was overcome by pity, and took it up again. He carried the child out of the hut. "Put me on the sod-bank!" cried the child. He put it on the sod-bank. "No, take me up again!" He took it up again. "Take me into the hut!" The old man entered the hut, and continued to coddle the child, for it was crying all the time. He was very angry with it, but had no heart to leave it alone. All of a sudden the old woman laughed aloud in his very arms. "Oh, you vermin! You have worried me to death!" The old woman jumped down from his arms, and fled. The old man was so tired that he lay down immediately, and fell asleep.

The hut, however, belonged to the Mouse people. As soon as the old man was fast asleep, a number of the Mouse people went into the hut. "Oh!" they said, "here is Raven sleeping in our hut. Let us play a trick on him. Who has a piece of red cloth?" — "I have!" said one small Mouse. "Then let us sew it firmly over Raven's eyes." When this was done, another Mouse said, "Now, let us tie a bag under his anus, so that his excrement will fall into that bag." They fastened the bag to him, and then awakened the old man, who looked around, and saw everything flaming red. "Fire!" thought he. "The house is burning!" He ran away frightened. On the way, however, he wanted to ease himself. He crouched and defecated; but when he arose and looked back, he could not see any excrement. "What a strange place!" thought he, and made another effort; but still he did not see anything on the ground. He was frightened still more, and ran home. When he came to his house, he saw that it was also flaming red. "Fire!" cried he to his wife. "Take your best son, and break his head against the wall. Put out the fire with this sacrifice." The old woman took one of their sons, and, striking him against the wall, smashed his head into fragments. The old man continued to cry, "Put out the fire! Our house is burning!" Then the old woman looked at her husband. "How now?" said she. "You have a red cloth over your eyes!" — "Oh!" said the old man, "this is a trick of the Mouse girls. They were sewing in the hut, and probably they have sewed this cloth over my eyes." The old woman scolded her husband. "Instead of bringing up my children, you only destroy them one by one."

The old man turned to go out; but the old woman said to him again, "You smell very bad. What is the matter with you?" — "Oh, my wife!" said he, "I do not know what has happened to me. I found a very strange place. After I squatted down and tried to defecate, I found nothing on the ground beneath. I will try again: perhaps it will be otherwise here."

He went out and tried to defecate; but when he looked down on the

I: Jochelson E-5 (1900-01) 1908 RYU Koryak
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ground, there was no excrement at all. "It is some sorcery," thought Raven. "Let me go and call the old woman. — Come here!" he said to the old woman. "There is some sorcery about this matter. Let me try once more, and you watch me to see what is wrong." He took off his trousers and squatted down. The old woman saw the bag, and said to him, "Who fastened the bag to your buttocks?" — "Oh!" said he, "surely the Mouse girls played this trick on me." — "Well," said the old woman, "you have destroyed one of my children; now help me, at least, to bring up the others." — "I will," said the old man. "Now make haste and twist some snares. I will go and spread them to catch ptarmigan."

He went for ptarmigan, and, spreading his snares, soon caught a great many birds. Then he built a hunting-lodge, and lived in that place, without regard to his children. After a long time, however, he visited the old woman. She asked, "What luck have you had? Have you caught any birds?" — "None at all," he answered. "I am almost starved to death." The old woman gave him food, and then he said, "I will go and look after my snares. Perhaps a bird or so is caught in one of them." He went away. The old woman followed him. He was so busy with his snares that he did not notice the old woman. Finally she found the hunting-lodge, and, entering it, saw all the ptarmigan that Raven had caught. "Oho!" she said; "see how faithless the old man is!" She took a ptarmigan, plucked it thoroughly, and then instructed it how to frighten Raven. "Hide yourself," she said; "but when the old man takes off his clothes to go to bed, run out of your hiding-place, and imitate his actions. Repeat all he says, and follow him about everywhere." In this manner the old woman spoke to the ptarmigan. Then the old woman went away.

Raven came to the cabin. It was already dark. He brought a big bundle of ptarmigan, and placed his pot near the fire to cook his supper. The cabin grew very warm: so he took off all his garments, and sat naked near the hearth. All at once a ptarmigan jumped out of the darkest corner, and cried, "Karebebebe!" It began to run around, crying, "Karebebebe!" The old man was frightened. He said, "This is again some sorcery!" The ptarmigan repeated, "This is again some sorcery!" — "Oh!" he said, "it is a charmed ptarmigan!" and the ptarmigan repeated, "Oh! it is a charmed ptarmigan!" The old man ran away quite naked; but the ptarmigan followed close behind. He hurried to his wife, and rattled at the door. "Oh!" he cried, "open the door!" and the ptarmigan repeated, "Oh! open the door!" The old woman opened the door. "Oh, my wife! take a club!" — "Take a club!" repeated the ptarmigan. "Kill this charmed thing!" — "Kill this charmed thing!" repeated the ptarmigan. Then the old woman asked him, "Tell me, will you again eat all you catch by yourself?" —. "Nevermore!" cried Raven. "My lodge is full of birds. But please kill this awful charmed thing." The old woman seized a club and killed the ptarmigan. "I am afraid to go to the lodge,"

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak
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said the old man. "Please go and get the ptarmigan." The old woman brought the ptarmigan, and they ate their fill.

Then the old man went to sleep. The old woman sat down at the window to mend her coat. In the mean time the Mouse girls came to the window from the outside, and went acoasting on their sleds past the window-sill. The window was darkened, and the old woman had not enough light. Then she cut off her nose, saying, "It is the nose that shuts out the light." But it continued to be dark. She had very thick lips: so she cut them off, saying, "My lips shut off the light." Still it was dark, as before. After that she cut off her cheeks; but the light was no better. At last she looked out of the window, and saw the Mouse girls coasting. "Oh, those Mouse people!" she said. "It is because of their tricks that I have cut off my whole face. I have lost my lips and my nose."

She sewed up a large bag, and came out of the house. The Mouse girls continued coasting. "Ah, ah!" said the old woman, "really you are very clever at this game. Now slide down all of you at the same time. I want to see who will be the first to come down." Meanwhile she opened her bag and spread it near the window-sill with its mouth upward. The Mouse girls slid right into the bag. "Now I am going to keep you in this bag till your meat is old enough to suit my taste," said the old woman. The Mouse girls cried, and begged her to set them free. They said, "We will bring you every kind of food that exists in the world for our ransom;" but the old woman was so angry that she paid no attention to their promises. She took the bag into the thick of the forest, and when she found a large tree, she said to it, "O tree! bend down your top." The tree bent down, and she tied the bag to its top. Then she said again, "O tree! raise your top;" and the tree stood straight again. Then she said to the Mouse girls, "Now stay there until your meat is stale. When it is ready, I will come and eat you." She left them and went home.

The Mouse girls were crying on the top of the tree. At last a fox heard their cries, and came to the tree. "Who is crying there?" — "We are crying, Auntie Fox," said the Mouse girls. "How did you get there?" asked Fox. "Raven's wife put us here." — "And how did she do it?" — "She said, 'O tree! bend down your top;' and the tree really bent down. Then she tied us to the top." Fox cried, "O tree! bend down your top!" The tree bent down, and Fox untied the bag and set the Mouse girls free.

The Mouse girls were very happy. Fox said to them, "Go and fetch plenty of moss." In a moment the Mouse girls brought the moss, and Fox filled the bag with it. She tied the bag to the top of the tree, and said, "O tree! stand straight again!" and the tree returned to its former position. The Mouse girls went with Fox, and lived in her house. Fox told them to go and bring her all kinds of things. "Now you have to serve me for a

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while. If it had not been for me, the old woman would have eaten you." The Mouse girls went pilfering everywhere for the benefit of Fox, and brought her all sorts of objects, especially a variety of food. Fox became quite well-to-do, and lived in affluence.

In two weeks the old woman said, "Let me go and look at the Mouse girls. Probably their meat is now just good for eating." Raven heard her words, and said, "Please take me along." She said, "Come along! I have there a big bag full of mouse-meat. I will give you some of it." They came to the tree, and she said, "O tree! bend down your top!" The tree bent down. But there was no meat in the bag: it was filled with damp moss. "Oh!" said the old woman, "I am sure Fox did this. I will go and kill her for that."

When Fox saw the old woman approaching, she hurriedly called the Mouse girls, and bade them bring plenty of alder-bark. Then she made them chew the bark, and spit the juice into a vessel. She bandaged her head with towels. She laid herself down on a bed. She placed close to her pillow a bowl of red alder-juice. Then she ordered the Mouse girls to conceal themselves, and began to groan like one very ill. The old woman entered. "Good-morning, little Fox!" — "Good-morning, grandmother!" — "Little Fox, why have you let all the Mouse people out of my bag?" — "Leave me in peace," said Fox. "I have nothing to do with this. This is the third week since I was taken dangerously ill." — "Oh, poor Fox!" said the old woman. "You certainly do look ill." — "It is true," said Fox. "See the blood I have lost within the last few days!" — "It is awful!" said the old woman. "Perhaps you will empty this bowl for me," suggested Fox. "It is really overflowing."

The old woman took the bowl and started to go. "Empty it into the river," said Fox, "from a place where the bank is the steepest. But mind you, while carrying the bowl, try to keep your eyes from looking behind you: otherwise you will become ten times more ill than I." — "No," said the old woman, "I shall not look behind."

She took the bowl and carried it away; but Fox stole along behind her. The old woman heard somebody following her, but was afraid to look back, lest she become ill. At last she came to the river, and, choosing a steep place, was about to empty the vessel. At that moment Fox pushed her from behind down the bank into the river. The old woman tried to swim, and cried, "Oh, little Fox! save me! I am drowning!" — "I will not save you. Why did you wish to kill the Mouse girls?" The old woman was drowned, and the Mouse girls were full of joy. They served Fox still better than before. They brought her edible roots of *Claytonia acutifolia*, and they all lived happily ever after. That's all.

Told in the village of Tighi'l by a Russianized Kamchadal.

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132. The Thunder People and Raspberry.*

Sū'na-ñe'ut had a daughter whose name was Raspberry[1] (Ăyanu'mlixčax). When she was full grown, the Thunder people came down and wanted to marry her. She, however, rejected their suit. Then they came down from the sky through the roof-entrance, and trampled on her. She became more considerate, and treated them with all kinds of roots and berries, everything that grows on the ground. That's all.

Told in the village of U'tkholoka.

133. Kutq and his Sons-in-Law, the Winds.*

Raven (Kutq) lived with his wife Miti'. One of their daughters was Sū'na-ñe'ut; the other one, Añá'rukla-ñá'ut. One of their sons was Eme'mqut; and the other, Čiji'l-kutq. North-Wind (Yemī'hın) courted the elder daughter, and married her. Then clear frosty weather set in. It was so cold, that, when people walked about, blood would drip from the tips of their nails. Therefore Raven felt annoyed.

At the same time came South-Wind (Riri'un), who married Raven's other daughter. Then the weather grew milder. It began to rain, and it was damp and warm. Raven was pleased with the change. He argued, that, though his garments became damp, it was easy to dry them again; whereas the cold hurt the body.

Sū'na-ñe'ut was pregnant, and gave birth to a son. Her husband said to her, "While I am with you, there will be some clear weather in this country: when I am gone, you will live in constant dampness." Then he left his wife and went away. Immediately it began to rain in torrents. Dampness continued without cessation. All living things were starving, — men, beasts, and herds. Raven lost his eyebrows, which fell off because of the damp; and Eme'mqut, likewise, lost half the hair from his head. They had no food, and were starving. Sū'na-ñe'ut tried to sustain her mother with scraps of food that she gathered around their house.

One day she took an old skin of a ground-seal from their storehouse to cut a garment for her little son. When it was ready, she dressed her boy in it, and said to him, "Go to the country where your father lives, and try to find him. I shall stay with the other people, and we will wait for you: but perhaps we shall starve to death before you get back." The boy went in search of his father. In the mountain-passes near his father's house, he fell down from exhaustion. North-Wind's sister went out of the house, and

[1] *Rubus arctious.*

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saw some dark object in the mountain-pass near by. She said to her brother, "You roam about the world, and tell us nothing of what you have seen. Perhaps you have left a son somewhere, and it is he who has fallen from hunger and exhaustion. Go, therefore, and bring him here." North-Wind brought his son into the house. They took off his seal-skin garments, and dressed him in a nice suit of soft mountain-sheep-skin. Then North-Wind's sister said to him again, "You roam all over the world, but you tell us nothing of what you have seen. Perhaps you have somewhere a wife who is starving without your help. Go, find her, and relieve her from want."

About this time Sü'na-ñe'ut went out of her house, and saw far ahead a faint streak of light breaking through the clouds. Then her husband and her son came to her mind, and she said, "There was a time when I had a husband. We lived, and had plenty to eat, and now we are dying from want." Miti' also began to complain, and said, "There was a time when we had a dry son-in-law who gave us dry weather. While he was with us, we lived in abundance, and had our choice of the best food. But this son-in-law of ours is good for nothing: he is rotten, and we rot with him." Meanwhile the sky began to clear, and a bright dawn arose above the horizon. The air grew drier, and at last North-Wind came. They had again plenty of food. Raven grew angry with his other son-in-law, and kicked him out of the house. After that they lived well again. That's all.

Told in the village of Ka'vran.

134. Big-Raven and Big-Crab.*

It was at the time when Big-Raven (Quskı'lnaku) lived. His wife was Miti'; his eldest son, Eme'mqut; his second son, Kotxama'mtilqa'n; his eldest daughter, Sü'na-ñe'ut; his second daughter, Añ'arukla-ña'ut. His third daughter, N·a'a, was his favorite. Miti''s brother was named Cici'lxan; her sister, La'ki. They all lived together.

Big-Raven went along the coast, and saw Crab (A'vva) lying on the sand. At first he thought it was a flock of geese; but soon he was sure it was Crab. Then he began to sing, "O Crab! You have slept long enough. Now it is time for you to wake up. I am very hungry. When the tide comes, take me on your back; take me to your land; give me plenty to eat." — "All right!" said Crab.

He took him on his back, and carried him down into the depths of the sea. There Big-Raven was fed with dried seal-meat that was harder than dry wood. Crab's sons said, "Do not give him any water to drink. Let him tell us what brides may be had at his house." They dried up the river, so that he could get no water to drink. Big-Raven awoke, and wished to drink,

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but there was no water. Then he sang, "Just as we are living now, the same kind of life shall people lead in future times. The people will give their daughters to be married. My elder daughter, Sŭ'na-ñe'ut, is now sitting complacently looking at her reflection in the water-hole, and I am dying from thirst."

Then they let fall a single drop of water on the tip of his tongue. After a while he sang again, "Just as we are living now, the same kind of life shall people lead in future times. Daughters shall be given in marriage. My second daughter, Añá'rukla-ñá'ut, is sitting now over a water-hole, and I am dying from thirst."

Then they let fall another drop of water on the tip of his tongue. After a while he sang again, "Just as we are living now, the same kind of life shall people lead in future times. Daughters shall be given in marriage. My youngest daughter, N·a'a, is looking at her reflection in the water-hole, and my throat is parched from fiery thirst."

Then they let the river flow. Big-Raven drank his fill, and took along a bucket of water. Then Crab carried him back to his house.

On the next day three seamen came to get the brides. Two of the girls staid in the house; but the mother hid the youngest one deep in the cellar, and put her inside of a sleeping-room with a threefold cover. The eldest guest hugged Sŭ'na-ñe'ut, and in a moment a baby began to cry inside of one of the legs of her breeches. Then Sŭ'na-ñe'ut said, "Rip open my breeches, and take out the baby. It will be stifled in there." The second guest did the same with Añá'rukla-ñá'ut. The third one had no bride. He could not sleep because he felt so lonesome. About midnight he observed the old woman stealing out, carrying food in a basket. He followed quietly, and, after the woman had come back, he arose, and felt about with his hands until he found the door. He entered the cellar, and found the girl, who immediately was delivered of a daughter.

After a while Big-Raven said, "You have staid here long enough. It is time for you to take your wives to your own country." The seamen went, and Raven's sons followed. After a while Raven's sons married among the Sea people, and brought their wives to their own country. Now they began to live happily, and left off quarrelling among themselves. That's all.

Told in the village of Seda'nka.

135. Sŭ'na-ñe'ut and her Goose-Husband.*

A party of geese came to a lake. They had fine broods of young goslings. When the autumn came, the geese wished to fly away. All the goslings took wing, except one that was unable to fly. The other geese waited a while for it. At last the ice began to cover the sea, and the geese flew away.

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They kept their eyes straight ahead of them, as they did not wish to look back and see the poor gosling that was left behind. Goose-Boy remained alone on the lake, and sang, "Ah! I have no wings, and I am left behind because I am unable to fly." A Fox walked along the shore, and, hearing the song, went nearer. "Why are you crying so piteously?" — "I am crying because I am left alone." — "Come nearer; swim to the shore. I will take care of you." — "I am afraid you will eat me." — "Don't worry about that. When the lake freezes, I shall eat you, just the same."

Big-Raven was flying about. "What is it crying there so bitterly?" said he. "Let me have a look at it." After he had seen the gosling, he went back to his house, and said to Miti', "Call your eldest daughter, Sú'na-ñe'ut." Miti' thought, "Certainly he wants to blight her life again." Nevertheless, she called her. "There on the lake," he said, "a Goose-Boy has been left alone. Will you bring him home and take care of him?" — "Oh!" she said, "you are at it again. You want to utterly blight my life!" — "Nay," says he. "If you are a brave girl, you will get along very well."

Sú'na-ñe'ut took the gosling. In due time spring came, and Goose-Boy grew large, and began to fly about in search of food. Sú'na-ñe'ut, however, ate by herself, feeding on meat. Her Goose husband was absent for a long time, and Sú'na-ñe'ut began to worry. She went out of the house and looked in all directions. At last she laid two eggs, which she ate immediately. After that the geese arrived, and the Goose-Man flew to meet them. The first-comers were no relatives of his, but the next were his parents. They were very angry with their daughter-in-law because she had eaten the eggs, and therefore they flew away, leaving her behind. She tried to follow; but her short wings proved too weak. Then the Goose people flew upwards, and Sú'na-ñe'ut was left down here.

Told in the village of Seda'nka.

136. Raven's Quest of a Bride for Eme'mqut.*

It was at the time when Raven (Qutq) and his wife were living. They went to gather stone-pine nuts. He said, "Let us call to each other, 'Iho!'" They called to each other from a distance. Raven called, "Miti'!" and she answered, "Iho!" He was pleased with his idea, and said, "Now let us call to each other with a repeated call." Again he called, "Miti'!" and she answered, "Ihoho!" He was pleased with that still more, and said, "Let us call to each other with a thrice-repeated call." She was tired, and when he called again, "Miti'!" she answered "Ihohoho!" but in a very angry voice. Raven felt annoyed, and, transforming himself into a raven, flew away.

He came to a village, and alighted on a big tree. A girl passed by,

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and said, "There is that miserable bird! Why does it come here?" Raven said nothing. Another girl passed by. "Oh!" she said, "this poor bird has come here again!" and she fed it with scraps of meat and with crumbs of pudding. After that Raven went home, and, meeting Eme'mqut, he said to him, "I have found a good bride for you. Go and choose for yourself. Take the pleasant one, but leave the one that is cross-tempered."

Eme'mqut transformed himself into a raven, and flew to the village. He also alighted on a tree. One girl passed by, and said, "There is that miserable bird again!" He let her go by. The other girl said, "There is that poor bird again!" and fed it with meat and pudding. Eme'mqut dropped down from the tree, and caught the girl. In the next moment a small child was heard crying in her arms.

They went home. Raven whistled, and several reindeer came to him one by one. Some were spotted; others were black; still others, pure white. He gave the spotted ones to his son, and the white ones to his daughter-in-law. The black ones he drove himself. They arrived at their house. Eme'mqut said to his mother, "Mother, I have brought a young bride. Kick the walls of the house [to make it larger]!" Miti' kicked and pushed the walls, and the house became larger. After that they lived well, and so they still live, even at the present time. That's all.

Told in the village of Seda'nka.

137. Kutq's Daughters.*

Two daughters of Raven (Kutq) found a whale, and entered its body. Then they began to float on the sea with the whale. After a long time they drifted ashore. The younger one was sleeping. The elder one came out, and, walking along the shore, began to gather willow-herb (*Epilobium angustifolium*). She brought back what she had gathered, and put it under the pillow of her sister. Then the latter dreamed. "Oh!" she said, "I dreamed I was eating willow-herb." — "Well," said the other, "look under your pillow." The younger one looked under her pillow, and found the willow-herb and various kinds of leaves and grasses.

They went out and walked along the shore. Close by was a village of the people of that country. The elder sister said, "I shall be married there. I shall transform you into a she-bear, and leave you here. When a suitor comes to take you, you must refuse him. The last to come will be the worst of all. He will carry a spear of shell. That one you must allow to take you." She transformed her into a she-bear, and tied her to a tree. Then she went to the village. Immediately she was married there. Then she said, "Down on the coast is still another girl." All the young men of

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the village went to look for her; but the she-bear reared on her hind-legs, and allowed no one to approach.

The last one to come, the worst of all, who carried a spear of shell, this one she permitted to approach, and, lifting her left paw, caused him to spear her. When he skinned the body, she turned into her former self, and he took her to the village. That's all.

Told in the village of Seda'nka.

138. The Girls and the Bears.*

A brother and a sister lived together. The brother made arrows. They were most beautifully made. He would not allow his sister to look while he was at work. He would say to her, "Do not look at my arrows! Your looking at them will cause them to break." His sister could not help looking at the arrows: so he pushed her, and she fell off from their pile-house. She lost her way in the thick underbrush, and at last came to a bear-den. A Bear-Girl came out, and jumped for joy, because she regarded the stranger as a new companion. She caught with her teeth the edge of the new-comer's coat, and even bit her several times as a sign of welcome.

The old She-Bear also came out. "Leave her alone!" she said. "You have torn her coat to pieces. Let her come into the house." The girl entered, and sat down to mend her coat. The old She-Bear looked on, and thought, "She sews very well. She is a good worker." Then she said, "My sons will come soon. Hide yourself. They are fierce, and they might do you harm." Then the girl hid herself. In a short time five young Bears came into the house.

"Oh, oh!" they said, "there is a woman smell here!" — "Nay!" said the mother. "You roam everywhere, smelling all kinds of odors: then you come home and ask about the smells. Take your supper and go to sleep." They tossed some fat salmon-heads to their sister. "Pick out the gristle!" Bear-Girl began to pick out the salmon-gristle; and the stranger stealthily helped her with her work. After supper the Bear-Men went to sleep. Then the old She-Bear said to her guest, "Now begone: otherwise they may find you in the morning." The girl stepped off quietly. About midnight the old She-Bear awakened her youngest son, and said to him, "You really ought not to sleep so soundly. While you were sleeping, a nice girl came to the house, and now she has gone again. She would have made a good bride for you. Go and try to bring her back."

The young Bear ran in pursuit; but the girl was already approaching her village. The people came out to meet her, and, seeing a bear following her, shot him with an arrow. The girl skinned the carcass; and as soon as the

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skin was off, a nice young man came out and wooed the girl. It was Eme'mqut. He married the girl. 773 539

Now, the girl had a female cousin who was good for nothing. This cousin envied the good fortune of the exile. She also had a brother who made arrows, and forbade her to look at them. She looked on, notwithstanding; but the arrows did not break. Then she took them, and broke them with her hands. Still her brother did not push her, and she had to jump down from their pile-house of her own free will.

After long wandering through the forest, she also found the bear-den. Bear-Girl came out, and tugged at her coat. "Oho!" she said, "see how she has torn my coat! See what damage she has done!" The old She-Bear requested her to enter. She sat down to mend her coat. The old She-Bear saw that she was very unskilful with her needle. The Bear-Men came, and the She-Bear told the guest to hide herself. At first she refused to obey; but Bear-Woman finally persuaded her to accept her advice. At last the Bear-Men went to sleep. The old She-Bear said, "Now begone!" The girl went out, but slammed the door, crying aloud, "I am going away!" Then the She-Bear began to think, "This one is really too bad!" She did not awaken any of her children. A big shaggy dog lay on the flat roof of the house, and the She-Bear told him to follow the girl. The dog followed. The girl came to the village, shouting, "A bridegroom is following me!" They came out and killed the dog. On skinning his body, nothing happened, and the dog's carcass remained a simple carcass. That's all.

Told in the village of Seda'nka.

139. How Kutq jumped into a Whale.*

Raven (Kutq) walked along the sand-spit, and found a small seal. He said, "If you were a good find, you would not be so far from the water;" and he pushed it back into the sea with his toe. Then he walked on, and found a spotted-seal. "If you were a good catch, you would not lie so far from the water." After that he found a big ground-seal, and treated it in the same manner. Then he did the same with a white-whale, and with an old bowhead-whale. At last he found a finback-whale, and then he said, "This is a good thing." He shouted to the people of the village, "I have found a whale!" Then the Koryak reindeer-breeders were seen hurrying to the whale from various directions. They had large knives. Raven was so frightened that he jumped into the mouth of the whale-carcass. He found there plenty of oil, and, filling his mouth with it, he jumped out and flew away. A Fox woman saw him, and asked, "From where are you?" — "Yum, yum,"[1] replied

[1] Yu'kyuñ — the whale. Raven tried to say, "From the whale," without opening his mouth.

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Raven. "What did you say?" — "From the whale!" As soon as he said so, the oil dropped down from his mouth, and fell on the Fox's back. "That is good," said the Fox. "I also have received some oil." She wrung her coat dry, and filled a large wooden trough with oil. Raven also stored the remaining oil. Then the Fox made a cake of all kinds of berries, and sent it to Raven to show her gratitude, and by way of payment. With it, however, she killed him.[1] That's all.

Told in the village of Seda'nka.

[1] Evidently by poison mixed with berries.

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XV. — CHARACTERISTICS OF KORYAK MYTHS

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The general features of Koryak mythology have been discussed in Chapter VII (pp. 115 et seq.). In general character the mythology of the Koryak, Kamchadal, and Chukchee shows many similarities.

Comparison with Kamchadal Mythology. — All that we know of the Kamchadal mythology from Steller,[1] and from the Kamchadal myths given in Chapter XIV, leads to the conclusion that the Koryak and the Kamchadal had one and the same folk-lore. Steller relates only two complex myths, — one containing the story of Kutq's adventures with the mice, and the other telling of his love-affair with Excrement-Woman. The former myth will also be found among the Kamchadal tales in this book,[2] and both tales occur among the Koryak myths.[3] Besides, when summing up the general characteristics of Kamchadal mythology, Steller says that the entire folk-lore of the Kamchadal consisted of indecent tales about their god Kutq (Raven), as Steller calls the founder of the Kamchadal world. In this respect Kamchadal mythology corresponds closely to that of the Koryak, and forms a clearly defined cycle, consisting exclusively of raven myths. It may therefore be stated without hesitation that whatever is true of Koryak folk-lore is just as true of that of the Kamchadal.

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Steller also mentions three separate episodes from tales about Kutq which he had heard told. In the first of these episodes, Kutq's gluttony is described. He reaches a river, and sees the ground on the opposite bank covered with berries. Being unable to cross the river, he cuts off his own head, and throws it across, so that it may eat the berries.[4] The second episode, which is illustrative of the concupiscence of Kutq (who tried to have sexual intercourse with all objects that he met), relates that he once found a valved shell on the seashore, with which he had intercourse. The valves closed, and cut off his penis.[5] This calls to mind the tales about the vagina armed with teeth. The third episode, which reflects the coarse tendency of the Koryak imagination in general, tells how Kutq once took Chāchŷ (thus Steller calls Raven's wife) for an underground house, her vulva for the entrance-opening, and her anus for the underground passage of the ancient Kamchadal house, which was used for a draught.[6] He entered the house through the vulva, found the liver, and was about to take it, when it began to move. Then he became frightened, and ran out of the underground house.[7] In the Koryak tale, Big-Raven entered Miti''s anus as though it were the entrance to an underground house.[8]

[1] Steller, pp. 253-284.
[2] Tales 88, 121, 130 (pp. 260, 316, 324).
[3] Tale 131 (p. 329).
[4] Steller, p. 262.
[5] Ibid., p. 263.
[6] See pp. 14, 53; Steller, p. 212.
[7] Steller, p. 263.
[8] Tale 25 (p. 169).

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4 KAMCHADAL RY3 CHOKCHEE RY2

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It is important to point out here some peculiarities of the present Kamchadal myths as compared with those related by Steller, and with the Koryak myths. In the myths collected by Mr. Bogoras, adventures are ascribed to Kutq and to members of his family, which, among the Koryak, are told about kalau.[1] For instance, in one tale[2] Miti′ cuts off her nose and lips, and catches the mice which are in her light; but the Fox sets the mice free, and finally kills Miti′ by throwing her down a rock. In Koryak tales[3] all this is told with reference to a kala-woman. I am inclined to attribute this divergence to the effect of Russian influence. The Kamchadal adopted Christianity long ago, and in a certain sense they are devout Christians, while the Russian priests constantly try to persuade the natives of Siberia who have been converted to Christianity that their former gods are devils and evil spirits. Thus, the Yukaghir of the upper Kolyma, in my presence, called their ancient guardian-idol, which was hanging in the woods, "Satan;" and the scaffold graves of their ancestors, and those above ground, which they used to worship, the Russianized Yukaghir of the Lower Kolyma now call "the graves of the perished (могилы пропащихъ)," an expression which is otherwise applied to animals only; and they remained quite indifferent when I proceeded to open those graves.[4]

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Comparison with Chukchee Mythology. — The relation of the Koryak folk-lore to that of the Chukchee is somewhat different from its relation to the Kamchadal folk-lore. As may be seen from the publications of Mr. Bogoras,[5] the influence of the Eskimo myths upon Chukchee folk-lore was greater than that upon Koryak folk-lore; and the cycle of raven myths is therefore less preponderant than that of the Koryak. Big-Raven and Raven-Man of the Koryak are merged into one person named Ku′rkıl (Raven); and the Creator of the Koryak myths, identified among the Koryak with Big-Raven, appears among the Chukchee (with the exception of the passages enumerated before)[6] as a being independent of Ku′rkıl, but the same as the Supreme Being. From this we may draw the conclusion that the raven of the Chukchee, owing, perhaps, to the effect of their contact with the Eskimo, has lost its place as the ancestor of the tribe, and remains merely a hero of the animal epos. On the other hand, the Chukchee have retained more cosmogonic tales about the raven than the Koryak, which, however, might be explained by the fact that Koryak folk-lore is on the decline. Incidents of maritime life, which are very prominent in the Koryak myths, are even more prevalent in those of the Chukchee, where they assume a coloring of Eskimo life.

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[1] Tales 32, 56, 79, 112 (pp. 181, 212, 246, 402).

[2] Tale 131 (p. 331).

[3] Tales 32, 56 (pp. 181, 212).

[4] It must be noted here that in one Koryak tale of Kamenskoye (Tale 108, p. 295), Big-Raven's son, Emo′mqut, appears as a cannibal in the same manner as the monster gormandizer of Tale 112, p. 302. This may also be ascribed to Russian influence.

[5] Chukchee Materials, Introductory; Anthropologist, pp. 682, 683.

[6] See p. 17.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

757/271 two days three times a day: this produces a purging, and generally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the joins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

764/775 THE burial of the dead, if one can call throwing them to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corps, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

near the hut, that evil ſpirits, whom they imagine to be the occaſion of their death, ſeeing the dead body, may be ſatisfied with the miſchief they have done. However, they frequently remove to ſome other place, when any one has died in the hut, without dragging the corps along with them. 764 775 768

They throw away all the cloaths of the deceaſed, not becauſe they imagine they ſhall have occaſion for them in the other world, but becauſe they believe that whoever wears the cloaths of one that is dead will certainly come to an untimely end. This ſuperſtition prevails particularly among the *Kuriles* of the *Lopatka*, who would not touch any thing which they thought had belonged to a dead perſon, although they ſhould have the greateſt inclination for it. The Coſſacks make uſe of this ſuperſtition to prevent one another ſometimes from ſelling ready-made cloaths, by aſſuring the buyer that they belonged to a dead perſon. 784

After the burial of the dead they uſe the following purification: Going to the wood they cut ſome rods, of which they make a ring; and creeping through it twice, they carry it to the wood, and throw it towards the weſt. Thoſe who dragged out the body are obliged to catch two birds of one ſort or other; one of which they burn, and eat the other with the whole family. The purification is performed on the ſame day; for before that they dare not enter any other hut, nor will any body elſe enter their's. In commemoration of the dead, the whole family dine upon a fiſh, the fins of which they burn in the fire.[1] 764

1. [Chapter XX, which discusses the three Kamchadal dialects was not translated "as they are very unintelligible to an English reader." Chapter XXI is in the Koryak File as Source 23.]

CHAP

When they march on foot it is remarkable that two never go a-breast, but follow one another in the same path, which by use becomes very deep and narrow; so that it is almost impossible for one that is not used to it to walk therein, for these people always set one foot strait before the other in walking.[1] 481

[Chapters XI-XIV of this source are a summary (and a distorted one) rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2]

CHAP. XI.

The Opinions of the Kamtschadales *concerning* God, *the Formation of the World, and other Articles of Religion.* 776

THE *Kamtschadales*, like other barbarous nations, have no notions of a deity, but what are absurd, ridiculous, and shocking to a humanized mind. They call their god *Kutchu*, but they pay him no religious worship, and the only use they make of his name is to divert themselves with it; they relate such scandalous stories of him as one would be ashamed to repeat. Amongst other things they reproach him with having made so many steep hills, so many small and rapid rivers, so much rain, and so many storms; and in all the troubles that happen to them upbraid and blaspheme him.

They place a pillar upon a large wide plain, which they bind round with rags. Whenever they pass this pillar they throw a piece of fish or some other victuals to it; and near it they never gather any berries, or kill any beasts or birds. This offering they think preserves their lives, which otherwise would be shortened: however, they offer nothing which can be of use to themselves, but only the fins and tails of the fish, or such things as they would be obliged to throw away. In this all these people of *Asia* agree, offering only such things as are useless to themselves. 778 782 886

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

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772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 Information about the abundance of fur on Kamchatka received from Luka
648 Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 The Itel'mens' struggle against extortions and oppression expressed
648 itself at first in attacks on individual representatives of the tsarist govern-
669 ment and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other diseases which devastated entire districts. The remnants of the various
[614] clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 The system of tax collection through the village elders and the develop-
648 ment of barter with Russians resulted in the accumulation of private prop-
548 erty in the hands of some individuals. As early as the 1730's, there were
556 toyons (elders) who lent sables to their kinsmen to enable them to pay their
426 tribute, in exchange for subsequent work.

The economic condition of the Itel'mens did not improve in the latter half
175 of the 18th century. This was due above all to the system of tax collection
648 and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[466] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

7:Lesseps T-3 (1787-88)1790 Kamchadal

797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka* *, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller.

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 776 786 534 177 Koutka their new-born children, who, the moment they have left their cradle, are destined to become chamans. The veneration of the inhabitants of this village for sorcerers can scarcely be conceived; it approaches to insanity, and is really to be pitied; for the extravagant and wild absurdities by which these magicians keep alive the credulity of their compatriots, excites our indignation rather than our laughter. At present they do not profess their art openly, or give the same splendour they once did to their necromancy. They no longer decorate their garments with mystic rings and other symbolic figures of metal, that jingled together upon the slightest motion of their body. In like manner they have abandoned the kind of kettle *, which they used to strike with a sort of musical intonation in their pretended en-

* A sort of *tambour de vasque* called *bouben*. It is still in use amongst the Yakoutsk, as will be seen hereafter.

chantments,

[Mashura--analyst]

27: Sauer--308 T-2 (1789-93) 1802 Kamchadal
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way. 133 123 782 777

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſhed 133 137 372 313 342 [101] 177 439

CHAP. VII.

Of the VITIMSKY SABLES, *and the Method of hunting them.* 000

ALTHOUGH the ſable-hunting of *Vitimſky* does not properly belong to the deſcription of *Kamtſchatka*, yet as in treating of the latter we have had occaſion to mention the ſable, I thought it might not be amiſs to give an account of the various methods of this chace in different places. The *Kamtſchadales* do not ſtir out for a fortnight or more after 224/777
a piece of ill-luck, or having hunted one day without game; but the *Vitimſky* hunters ſpend almoſt the whole year in continual toil, and are very happy, if, in that time, they catch ten ſables for each man in company. It is true indeed, that ten com- 000
mon *Vitimſky* ſables are equal to forty of *Kamtſchatka:* but, notwithſtanding, if the inhabitants of *Kamtſchatka* would take the ſame pains as thoſe of *Vitimſky*, they might exceed them in the profits of hunting; for ſables are as numerous in *Kamtſchatka* as ſquirrels are upon the river *Lena*. The *Vitimſky* hunting is the more remarkable for being ſubject to many rigorous laws and ſuperſtitious obſervations, which the hunters bind themſelves to obſerve.

Before *Siberia* was conquered by the *Ruſſians*, it abounded 136
with ſables; but, at preſent, wherever the *Ruſſians* are ſettled, none can be catched; for ſables retire at a diſtance from all inhabited places, and live in deſolate woods and mountains. The ſable hunters go up by the river *Vitime* and the two rivers 000
Mama, which fall into that river, as far as to the lake *Orenne*, which is upon the right hand, as high and higher than the great cataract, where the beſt hunting is. The fineſt ſables are caught

upon

CLASS I. *Of the* SEA FOWLS.

The ſea fowls are found in greater plenty about the coaſt of the Eaſtern Ocean, than that of the *Penſchinſka* ſea; for the coaſt of the Eaſtern Ocean is more hilly and convenient for breeding. 136

The ipatka * is well known to all writers of natural hiſtory by the name of anas arctica, commonly called in *England* puffins. It is found upon the coaſt of *Kamtſchatka*, and the *Kuriſſki* iſlands, and even upon the *Penſchinſka* bay, almoſt as far as *Ochotſka*. It is about the bigneſs of, or rather ſmaller than, a common duck; its head and neck are of a bluiſh black; the back is black; the belly and all below white; its bill red, and broad towards the root, but ſomewhat narrower towards the point; upon each ſide are three furrows; its legs are red, its feet webbed, and its nails ſmall, crooked, and black; its fleſh is hard; its eggs are like hen's eggs; it builds its neſt with graſs on the cliffs of the rocks. The *Kamtſchadales* and *Kuriles* wear the bills of theſe birds about their necks faſtened to ſtraps; and, according to their ſuperſtition, their ſhamans, or prieſts, muſt put them on with proper ceremony, to procure them good fortune. 227 825

Another ſpecies of theſe birds is called meuchagatka †, and in *Ochotſka*, igilma: this only differs from the former in being all black, and having two yellowiſh white tufts upon its head, which lie all along from its ears to its neck like locks of hair. To the beſt of my remembrance this bird has never yet been deſcribed. Mr. *Steller* and I ſent ſome of theſe ſpecies of birds to the Imperial Muſeum. Among thoſe ſent by Mr. *Steller* there was a third kind which is found upon the iſland *Bondena*, in *Angermannia*, and upon the *Caroline* iſlands; and is ſome- 136

* Alca roſtri ſulcis quatuor, oculorum regione temporibuſque albis. LINN. F. ſuec. v. 42.

† Alca monochros ſulcis tribus, cerro duplici utrinque dependente. Anas arctica cirrata. STELL.

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

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772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

27: Sauer--302 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 777, 825

"Here are no lakes of any extent: the names of the principal ones are, Osernoi, about 40 miles from Cape Lopatka; Kronotskoi, 20 miles south-east of Tolbatshinski volcano; and another of less extent, situated about 40 miles north of Neizshni Kamtshatka, called Nerpitshi: the natives say that they are replete with fish; and tradition relates, that the fish of these lakes had two heads, or that they possessed legs; and, being sacred to some deity or demon, those who presumed to ensnare them were punished with misfortunes: some of the natives, however, seem to doubt the truth of this, while others still firmly believe it."

133 bubbling of water is heard. Here I dug, expecting to find water; but I found a ſtratum of ſuch hard ſtone that we could not dig through it. It is probable that the waters of the warm brook, that falls into the Eaſtern Ocean, have their origin from this place, for it is directly oppoſite to the riſe of that brook: and the laſt ſtream that falls into the river *Shematche* is likewiſe thought to derive its ſource from the ſame place, as it riſes from this ridge, upon the weſt ſide, in a deep hollow, ſurrounded with ſmoking hills. The very bottom itſelf is full of boiling ſprings for near a verſt and a half; all which join at laſt in one ſtream.

In this bottom are two large wells, that deſerve particular notice; one is five, the other three fathoms' diameter; the firſt one and a half, the other one fathom deep. In theſe the water boils up with white bubbles, and makes ſuch a noiſe, that one perſon cannot hear another in the common way of ſpeaking; nay, ſcarcely when he cries aloud. The vapour is ſo thick, that one cannot ſee a man at ſeven fathoms' diſtance; and the boiling of the water is only to be obſerved by lying down upon the ground. The earth between theſe wells yields like a bog, ſo that one is in continual fear of ſinking in. The water of theſe ſprings is diſtinguiſhed from all others by a black matter, like *Chineſe* ink, that ſwims upon the top, which ſticks ſo to the fingers that one cannot without difficulty waſh it off. They have, in common with other hot ſprings, clay, lime, alum, and ſulphur, of various colours. In all the above-mentioned ſprings the water is thick, and ſtinks like rotten eggs.

123 778 The *Kamtſchadales* eſteem all the burning mountains, and places where hot ſprings ariſe, as the habitations of ſpirits, and approach them with fear; but, as the latter are the moſt dangerous, they are under the greateſt awe of them; and therefore they never willingly diſcover them to any *Ruſſian*, leſt they ſhould be obliged to accompany him near them. It was by chance that I heard of them after I had travelled 100 verſts from the

the place; but this natural phænomenon appeared ſo curious that 228
I returned to examine it. The people of *Shematchinſki* village 823
were obliged to declare the true reaſon why they had not formerly diſcovered them, and much againſt their will were forced to ſhew me the place, but would not go near it: and when they ſaw that we lay in the water, drank it, and eat things boiled with it, they expected to ſee us periſh immediately; but when they ſaw this did not happen, they told it in the village as an uncommon wonder, and were aſſured that we muſt be very extraordinary people ſince even the devils could not hurt us.

This is remarkable, that north from the mouth of the river 133
Kamtſchatka, and weſt along the coaſt of the river *Oſernoi*, there are no hot ſprings, although it abounds in *Pyrites*, ſulphur, iron ore, and ſtones that yield alum and vitriol. Mr. *Steller* obſerves, that the appearance of the country of *Kamtſchatka*, and the frequent earthquakes there, give reaſon to think that it is full of caverns replete with combuſtible matter, which taking fire in the bowels of the earth produces earthquakes, and makes thoſe vaſt alterations of which we ſee numerous inſtances in rocky ſhores being torn off both upon the *Beaver* ſea, and in the iſlands which lie between *Aſia* and *America*. The combuſtible matter, he tells us, is kindled by the ruſhing of the ſalt water into thoſe ſubterraneous caverns, through their apertures towards the ſea; which hypotheſis is ſtrengthened by his obſervation that the earthquakes are moſt frequent about the equinoxes, when the waves of the ſea are driven by the great ſtorms with uncommon violence upon the ſhores; and eſpecially about the ſpring equinox, at which time the water always riſes higher than at any other: and the inhabitants of *Kamtſchatka* 823
and the *Kuriles* know this ſo well, that they always fear the beginning of *March* and the end of *September*.

It is very extraordinary, that no iron has been diſcovered here, 135
although ſome ore is obſerved mixed with clay and earth, to which

When they march on foot it is remarkable that two never go a-breast, but follow one another in the same path, which by use becomes very deep and narrow; so that it is almost impossible for one that is not used to it to walk therein, for these people always set one foot strait before the other in walking.[1] 481

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CHAP. XI.

The Opinions of the Kamtschadales *concerning* God, *the Formation of the World, and other Articles of Religion.* 776

THE *Kamtschadales*, like other barbarous nations, have no notions of a deity, but what are absurd, ridiculous, and shocking to a humanized mind. They call their god *Kutchu*, but they pay him no religious worship, and the only use they make of his name is to divert themselves with it; they relate such scandalous stories of him as one would be ashamed to repeat. Amongst other things they reproach him with having made so many steep hills, so many small and rapid rivers, so much rain, and so many storms; and in all the troubles that happen to them upbraid and blaspheme him.

They place a pillar upon a large wide plain, which they bind round with rags. Whenever they pass this pillar they throw a piece of fish or some other victuals to it; and near it they never gather any berries, or kill any beasts or birds. This offering they think preserves their lives, which otherwise would be shortened: however, they offer nothing which can be of use to themselves, but only the fins and tails of the fish, or such things as they would be obliged to throw away. In this all these people of *Asia* agree, offering only such things as are useless to themselves. 278 782 886

778 776 Besides these pillars several other places are reckoned sacred, such as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 825 All their opinions concerning both gods and devils are certainly very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they 777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon 775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think 772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we 775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh-

 ed

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237 262 251 those made of timber, in that they are much lighter and go swifter. Of the seals' fat both *Russians* and *Kamtschadales* make candles; and besides the natives esteem it such a delicacy that they can have no feast without it. The flesh they boil or dry in the sun; but if there are great quantities, they smoke or bake it in the following manner: They dig a large pit in proportion to the quantity of flesh or fat, and pave the bottom with stones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the ashes, then lay at the bottom a layer of green poplar wood, upon this another of seals' flesh or fat, each separately; and thus alternately wood and flesh until the pit be quite full. They then cover it with grass and earth, to keep in the heat; and after some hours they uncover it, take out the fat and flesh, and lay it up for the winter. Both flesh and fat thus prepared is much more delicate than what is boiled; besides, it keeps without spoiling for a whole year.

825 796 782 When they have picked all the flesh from the heads of the seals they shew them all the respect that they would to a particular friend that visits them. I saw this ceremony in the year 1740 at the little fort of *Krodakighe*, which stands upon a river of the same name that falls into the Eastern Ocean. It was performed in the following manner: They brought in the skull or head of a seal, bound round with the sweet grass, and placed it upon the floor. Then a *Kamtschadale* entered with a bag filled with the sweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtschadales* rolled in a great stone, and set it opposite to the entry of the hut, about which they laid several stones; and two others tore the sweet herb, and made it into small bunches. The great stone was to signify the sea, the smaller the waves, and the bunches of the sweet herb the seals. This being done, they took three dishes of caviar mixed with kipre, hurtleberries, and seals'

fat

fat. This they ſqueezed into balls, in the middle of which they preſſed the ſweet herbs which were made to repreſent the ſeals: out of the birch bark they made little boats, which they filled with theſe balls made as above, and covered them with herbs. 825 796 782

After ſome time they took theſe boats and balls and toſſed them to and fro over the ſtones as if over waves, that the other ſeals might ſee with what reſpect the *Kamtſchadales* treated their friends, and conſequently might the more willingly fall into their hands. After this they placed the ſeals made of the ſweet herbs near to the great ſtone, or ſea, and all went out of the hut; but one old man, after he had ſet upon the threſhold a ſmall diſh with their broth which he had carried behind them, entered into it again, all the aſſiſtants crying aloud four times the word *Lignouleghe*. They could not tell what this term meant; nor could they give any other reaſon for their ſo crying out, but that their fathers did ſo. After this they again rolled the birch boats upon the ſtones; and going again out of the hut cried, as before, *Kouneouſhite aloulaighe*; that is, May the wind blow towards the ſhore. For while this wind blows a great deal of ice is driven towards the land, which is favourable for their killing the ſea animals. Returning into their huts, they rolled their birch boats a third time over the ſtones. They then put the ſkulls of the ſeals into a bag, and every fiſher preſent put in alſo a little of the ſweet graſs, with his name and ſome particular ſentence; that the ſeals might know how they had entertained them, and what valuable preſents they had made them.

Having, as they thought, by their entertainment and preſents, ſhewn all reſpects to their gueſts, they brought them out to the ſtair-head, where an old man put ſtill ſome more of their gruel into the bag, deſiring them to carry that to their friends that had been drowned at ſea. Then two *Kamtſchadales* who had been principally employed in this entertainment, took the bowls that

were

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

825 were filled with gruel and the ſeals made of graſs, and gave one
796 to each fiſher. They then went all out of the hut, and cried
782 *Uenic*; a word they uſe in calling to one another when they go to kill the ſeals or other ſea animals. Then taking out the ſeals made of graſs they threw them into the fire, praying them to make them frequent viſits; after which, returning into the hut, they put out the fire, and eat the gruel that was in the bowls.

136 The ſea horſe is but ſeldom ſeen about *Kamtſchatka*, and then only in the moſt northernly places. The moſt are caught near the cape of *Tchukotſkoi*, being both larger and more numerous there than any where elſe. Their teeth are what we commonly call fiſh-bone, the price of which depends upon their largeneſs or weight: the deareſt are thoſe that are about twenty pounds; but theſe are ſeldom met with, or even ſuch as weigh ten or twelve pounds, the common weight being five or ſix pounds.

The ſea lion * and cat, in their uſual ſtructure, differ very little from the ſea horſe and ſea calf, and are therefore to be reckoned of the ſame kind.

Some call the ſea lions ſea horſes, becauſe they have manes. In their ſhape they are like the ſea calf; and their necks are bare, excepting a ſmall mane of hard curled hairs: the reſt of their body is covered with a cheſnut-coloured hair. They have a middle-ſized head, ſhort ears, a ſnout ſhort and drawn up like a pug dog's, great teeth, and webbed feet. They are found moſt frequently about rocky ſhores or rocks in the ſea, upon which they climb very high, in great numbers. They roar in a ſtrange, frightful manner, much louder than the ſea calf; and they are thus far of uſe to people at ſea, that in foggy weather, by their roaring, they warn them of rocks or iſlands being near, as few rocks or iſlands in this part of the world are without theſe animals.

* Leo marinus. STELLER.

Although

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7:Lesseps T-3 (1787-88)1790 Kamchadal

797 rather than of proſelytes, and the gratifi-
177 cation of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka**, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller,

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 134, 137, 782, 821

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

27: Sauer--308 T-2 (1789-93) 1802 Kamchadal
116, 101, 177, 186, 776, 782

"He [CMC: i.e., the chief of Shapinski village] told me, that the Kamtshadals called themselves Itolmatsh (he says they are the Aborigines of the place), and the descendants of Newsteach or Newchtshatsh, and that their God was Newsteachtshitsh. Kouta is his intelligent spirit, the messenger of vengeance to their tormenting demons, and of rewards to the spirits of benevolence: he travels about in an invisible carriage drawn by flying animals resembling mice, but smaller than the human mind can conceive, and swift as a flash of lightning. 'Our Sorcerers (said he) were observers of omens, and warned us of approaching dangers, to avert which sacrifices were made to the demons: we were then wealthy, contented, and free.' He continued his discource thus as nearly as I could translate: 'I think our former religion was a sort of dream, of which we 'now see the reality. The Empress is God on earth, and her officers are our tormen-'tors: we sacrifice all that we have to appease their wrath, or wants, but in vain. They 'have spread disorders among us, which have destroyed our fathers and mothers; and 'robbed us of our wealth and our happiness. They have left us no hopes of redress; for 'all the wealth that we could collect for years would not be sufficient to secure one 'advocate in our interest, who dares represent our distress to our sovereign.' "

Awachinskaya bay, almost opposite the *Kareemchin* fort, are two high mountains, one of which smokes almost continually, and sometimes burns. /133

The breadth of the cape of *Kamtschatka*, between the mouth of the *Keeksha* and the *Awachinskaya* bay, measures from sea to sea, by a strait line, only 255 versts; a distance much less than that between the *Tegbil* and the *Kamtschatka*.

There are a multitude of rivulets which fall into the Eastern Ocean between the mouth of the *Awatscha* northward, and the river *Kamtschatka*, and from that again to the *Anadir*; but being of small note, we shall only remark any thing that may be curious relating to them; among which may be reckoned the mountain *Shupanoveskaya*, so called from *Shupanova* a stream near which it stands. This mountain is a volcano, and has smoked at the top in several places for many years, and sometimes rumbles, but does not flame. The *Camel's Throat*, a rivulet near this hill, is remarkable for the danger of its passage through a very narrow valley, between high and steep mountains, from whence the snow is apt to tumble upon the slightest accident, even, it is said, from a strong exertion of the voice; and, falling down in vast heaps, sometimes buries passengers under it; for which reason the natives make it criminal to speak aloud as they pass through the valley: in other respects the road is very convenient. On the south side of the river *Shophead*, or *Shupanova*, near the sea shore, are a great many pillars or rocks, which appear above water, and make its entrance very dangerous; a little beyond this to the south is a bay, called *Nutrenoi*, surrounded by rocky mountains, about four versts in length and breadth; and near it, about the head of a rivulet, called *Shenmeek*, are large wells of boiling water. Out of a mountain near these springs, in many places, proceeds a steam, and the bubbling of boiling water is heard, but no springs have made their way through yet, though there are considerable fissures here and there, and the steam issues forth with the same rapidity /133 823 784 /133

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions. 577 784

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. 825

This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries. 797 R. 177 .79

CHAP.

near the hut, that evil ſpirits, whom they imagine to be the occaſion of their death, ſeeing the dead body, may be ſatisfied with the miſchief they have done. However, they frequently remove to ſome other place, when any one has died in the hut, without dragging the corps along with them. 764 775 768

They throw away all the cloaths of the deceaſed, not becauſe they imagine they ſhall have occaſion for them in the other world, but becauſe they believe that whoever wears the cloaths of one that is dead will certainly come to an untimely end. This ſuperſtition prevails particularly among the *Kuriles* of the *Lopatka*, who would not touch any thing which they thought had belonged to a dead perſon, although they ſhould have the greateſt inclination for it. The Coſſacks make uſe of this ſuperſtition to prevent one another ſometimes from ſelling ready-made cloaths, by aſſuring the buyer that they belonged to a dead perſon. 784

After the burial of the dead they uſe the following purification: Going to the wood they cut ſome rods, of which they make a ring; and creeping through it twice, they carry it to the wood, and throw it towards the weſt. Thoſe who dragged out the body are obliged to catch two birds of one ſort or other; one of which they burn, and eat the other with the whole family. The purification is performed on the ſame day; for before that they dare not enter any other hut, nor will any body elſe enter their's. In commemoration of the dead, the whole family dine upon a fiſh, the fins of which they burn in the fire.[1] 764

1. [Chapter XX. which discusses the three Kamchadal dialects was not translated "as they are very unintelligible to an English reader." Chapter XXI is in the Koryak File as Source 23.]

CHAP

24: Lansdell-639 [2] M-2 (1879) 1882 Kamchadal
116, 177, 224, 771, 777, 784

" They have given up, to a large extent, their Shamanism, though they still take care, when hunting an animal, not to pronounce its name, lest they should be visited by ill luck."

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 776 786 534 177

Koutka their new-born children, who, the moment they have left their cradle, are destined to become chamans. The veneration of the inhabitants of this village for sorcerers can scarcely be conceived; it approaches to insanity, and is really to be pitied; for the extravagant and wild absurdities by which these magicians keep alive the credulity of their compatriots, excites our indignation rather than our laughter. At present they do not profess their art openly, or give the same splendour they once did to their necromancy. They no longer decorate their garments with mystic rings and other symbolic figures of metal, that jingled together upon the slightest motion of their body. In like manner they have abandoned the kind of kettle *, which they used to strike with a sort of musical intonation in their pretended en-

* A sort of *tambour de vasque* called *bouben*. It is still in use amongst the Yakoutsk, as will be seen hereafter.

chantments,

[Mashura--analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

756 chantments, and with which they announc-
786 ed their approach. In ſhort, they have for-
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7:Lesseps T-3 (1787-88)1790 Kamchadal

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mation of the dance increaſes. Like the Pythian on the tripos, he rolls his ghaſtly and haggard eyes; all his motions are convulſive; his mouth is drawn awry, his limbs ſtiffened, and every diſtortion and grimace is put in practice by him, to the great admiration of his diſciples. Having acted theſe buffooneries for ſome time, he ſuddenly ſtops, as if inſpired, and becomes now as compoſed as he was before agitated. It is the ſacred collectedneſs of a man full of the god that governs him, and who is about to ſpeak by his voice. Surpriſed and trembling, the aſſembly is inſtantly mute, in expectation of the marvels that are to be revealed. The ſelf-created prophet then utters at different intervals, broken ſentences, words without meaning, and what ever nonſenſe comes into the head of the impoſtor; and this is invariably conſidered as the effect of inſpiration. His jargon is accompanied either with a

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787 he has to announce; and the expreſſion and geſture of the orator vary in conformity to his feelings. I was furniſhed with this account by perſons entitled to credit, and who had contrived to be preſent at theſe abſurd revelations.

000 There ſeems to be ſome analogy between theſe chamans, and the ſect called quakers. The quakers pretend equally to inſpiration, and there are individuls among them, who, guided by its ſuppoſed impulſe, hold forth in their ſilent meetings, and break out in piteous lamentations, or ſudden ſtarts of extravagant joy. The difference is this: theſe prompt orators harangue extempore upon the ſubject of morality, whoſe fundamental principles they endeavour to recommend; whereas the Kamtſchadale declaimers underſtand not a word of what they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

numbers. The tegulchitch, or first kind, have nests very 136
roomy, neat, and spread with grass, divided into different apartments; in some of which they lay up the saranne quite clean, in others rough; in others, again, several sorts of roots, which they gather in summer with great labour, and lay up against winter. In dry sunny days they drag these out of their nests, and dry them. During the summer they live upon berries, and what else they can find proper for their food; never touching their winter provision so long as they can find any food in the fields. Among the several things found in their nests, I observed the saranne, the anacampserus, bistort, goats-beard, burnet, and cedar nuts.

These rats change their habitations like the wandering tartars, 136
and sometimes for a certain number of years they all leave 825
Kamtschatka, and go to some other place. This retirement is 787
very alarming to the *Kamtschadales*, who think it forebodes a rainy season and a bad year for the chace: but when these creatures return, they confidently expect a fine one and good hunting; so that, as soon as they begin to re-appear, expresses are sent to all parts to carry the good news. They always take their departure in the spring, first gathering together in vast numbers. They direct their course due west, crossing rivers, lakes, and even arms of the sea; and when, after long swimming, they reach the shore, they lie upon the banks, as if they were dead, 'till at length they recover their strength, and then set out again upon their march. Their greatest danger in the water is lest some ravenous fish should swallow them up: but upon the land they have nothing to fear; and the *Kamtschadales*, who are so greatly interested in their preservation, when they find them weak upon the banks of the rivers or lakes, they give them any assistance in their power. From the river *Pengin* 136
they go southward, and about the middle of *July* they generally reach *Ochotska* and *Judoma*. Sometimes their troop is so nu-

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

231 492 825 237 787 in the greateſt ſtorm, when a man cannot ſee the path, nor even keep his eyes open, they very ſeldom miſs their way; and if they ſhould, they go from one ſide to the other, 'till by the ſmell they find it again: and when it is abſolutely impoſſible to travel at all, which often happens, then the dogs lying round their maſter defend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231 Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

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237 bladders, which they use instead of corks to their nets. The
223 way of catching them is singular, being angled for as fishes are, in the following manner: they fasten a thick iron, or wooden hook to a long rope or strap, baiting the hook with a whole fish, the point of which comes out near the back fin, and then throw it into the sea; this the cormorants observing gather about it in flocks, and quarrel among themselves who shall have the prize, until the strongest obtains it and swallows it; then being drawn on shore, they take out the hook and bait by putting their hands into its throat. Sometimes they fasten a live cormorant, which they call a decoy, to the rope, and that it may not swallow the bait, tie down its bill with a cord: the others seeing the decoy swim so near the shore, come with greater security to the bait. The *Kamtschadales* make needle cases, and combs to comb their nettles, of the bones of their wings.

136 Besides the above-mentioned tchaiki, or cormorants, there is another species which haunt the rivers: these are called robbers, because they take the prey from the small birds; their tail is forked like that of the swallow.

136 The procellaria, or storm birds, are about the bigness of a
787 swallow; their feathers are all black, except the tops of their wings, which are white; their bill and legs black. They haunt about the islands, and before a storm they fly low and skim the sea, and sometimes into the ships, which the sailors look upon as the sign of an approaching violent gale.

136 The stariki *, or glupisha, belong to this species. The stariki are about the bigness of a pigeon; have bluish bills, and bluish black feathers about the nostrils, which look like bristles; the feathers of the head are of the same colour, interspersed here and there with white ones, which are longer and thinner than the rest; the upper part of the neck is black, but the lower black and

* Mergus marinus niger ventre albo, plumis angustis albis auritus. STELL.

being ſomewhat yellowiſh at the end, with a ſmall white ſtripe; the head is black, and upon its temples are ſmall white ſpots: it weighs about a pound and a half. 136

In the harveſt the females are found in the rivers, but none of the drakes: they are very ſtupid and eaſily caught where the waters are clear and ſhallow, for they do not fly away at the ſight of a man, but only dive, and therefore may be eaſily killed with poles, as I myſelf have frequently done. Mr. *Steller* ſaw ſeveral of this kind of ducks in the *American* iſlands.

They catch the ducks with nets in the following manner: in a wood that happens to ſtand between two lakes, or between a lake and a river, they cut a ſtrait paſſage, through which the ducks fly during the ſummer; here in the harveſt, when the fiſhery is over, the natives faſten to long poles ſeveral nets, which in the evenings they raiſe as high as the ducks are uſed to mount: round the nets a ſtring is drawn, by which they can reef them together, as ſoon as they find the ducks entangled; but they ſometimes fly with ſuch force and in ſuch numbers, that they break through. They likewiſe catch them in ſmall rivers with nets ſtretched acroſs the ſtream: but this is a method not peculiar to *Kamtſchatka*. 223

To this claſs belongs likewiſe the gagari, or columbus, of which there are four ſpecies *, three of which are large, and the other ſmall: the firſt of the largeſt has a tail; the ſecond a clay coloured ſpot upon its neck, a little above the crop: the third is called by *Wormius*, the northern lumme; and *Marſilius* calls the fourth the little lumme. The natives pretend to foretel the change of weather by their crying and flying; for they think that the wind muſt always blow from that point towards which they fly: however they are frequently deceived in their judgment. 136 825 787

* 1. Colymbus maximus. Gesn. Stell. 2. Colymbus arcticus lumme dictus. Worm. 3. Colymbus macula ſub mente caſtanea. Stell. 4. Colymbus five pedicipes cinereus. *Ejuſdem.*

Nothing plagues the natives in their huts ſo much as the lice and fleas; the 136
women ſuffer moſt from the former, by wearing very long, 515
and ſometimes falſe hair. Mr. *Steller* was told, that near the 302
ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them.

It is remarkable that in *Kamtſchatka* there are neither frogs, 136
toads, nor ſerpents. Lizards, indeed, are numerous enough, which 825
the natives look upon as ſpies ſent from the infernal powers for 787
information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others.

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Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

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Of their SHAMANS, *or Conjurers.*

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787 They are very great obſervers of dreams, which they relate to one another as ſoon as they awake in the morning, and judge from thence of their future good or bad fortune; and ſome of theſe dreams have their interpretation fixed and ſettled. Beſides this conjuration they pretend to chiromancy, and to foretel a man's good or bad fortune by the lines of his hand; but the rules which they follow are kept a great ſecret.

CHAP. XIII.

716

Of their CEREMONIES.

THE *Kamtſchadales* always celebrated three days in the month of *November*, which is hence called the month of Purification. *Steller* imagines, that this was firſt inſtituted by their anceſtors to return thanks to God for all his bleſſings; but that afterwards, through the ſtupidity of theſe people,

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slanting position (in the sad-iron shape the narrow end was lower) so that the tallow or blubber could run down to the wick from the heat of the flame. The Kamchadal used bear's tallow or seal's blubber, and also fish oil for lighting purposes. The present Kamchadal sometimes still use stone lamps for lighting, but often a tin box, iron frying pan, or a clam-shell substitutes for the stone lamp. In order to be relieved of the sharp odor, smoke and soot of the burning lamp the present Kamchadal put over the lamp a funnel made of birch bark, upside down, the upper tube of which is led outside through the ceiling (see figures 67, 68).[1] The wick consists of a bunch of dry grass, moss or of rag placed at the edge of the slanting lamp. At present the Kamchadal women make wicks of plaited nettle threads. Like the Aleut lamps, the Kamchadal stone lamps had no bridges or special grooves for the wicks, which we find in the Eskimo lamps. The only use of the Kamchadal lamp was for lighting purposes. The Kamchadal did not warm themselves over the lamp, like the Aleut, nor cook like the Eskimo. The Kamchadal had sufficient wood for making a fire when necessary, and their hearths warmed their earth-huts and served for frying meat and cooking vegetables and soups in clay vessels. The lamp was lighted from the hearth, which was usually always burning. The hearth was covered with ashes for the night, so that the smoldering fire might not be extinguished during the night. The fire of the hearth was looked on as the protector of the dwelling, and it was regarded as an unhappy omen should it go out. Once a year, however, at the beginning of winter, the family fire was put out, the hearth cleaned from old ashes, and a new fire started by the drill and sacred fire-board. The burning stone lamps were also extinguished and lighted again from the hearth's new fire.

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The Kamchadal lamps were made mostly from hard rock material, usually varieties of quartz. No lamps of soapstone, material in use among the Eskimo, were found in the Kamchatka excavations; neither were any of bone, of which the ancient Aleut made lamps. As the wick was placed by the Kamchadal at the edge of the lamp the borders of a bone lamp would have been burned off by the flame.

The cavity for oil or fat in some Kamchadal lamps represents a flat bottom with straight sides, while in others the bottom is rounded (see Plates 14, 15).

[1] Figures 67 and 68 are taken from Dr. W. N. Trushov's book: *Along the Western Coast of Kamchatka*, Memoirs of the Imperial Russian Geographical Society on General Geography, vol. XXXVII, No. 2, St. Petersburg, 1908, in Russian, figures 28 (p. 341) and 29 (p. 342).

7:Lesseps T-3 (1787-88)1790 Kamchadal

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27: Sauer--285-287 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 137, 787

"On the 11th August [CMC: 1792] in the harbour of St. Peter and St. Paul, I observed a number of swallows flying about, apparently much [286] frightened. They were red breasted, a species never remembered to have been seen here; and the inhabitants immediately predicted some remarkable event; they were, however, only seen during the morning. The next morning, about five o'clock, we were alarmed by a violent shock of an earthquake, preceded by a rumbling noise, little short of thunder. The motion of the earth was undulatory for nearly the space of a minute. I was dressing myself, and was thrown down, which induced me to get out of the house as quickly as possible. The water in the bay was agitated like a boiling cauldron. The shock came from the north-east, and appeared to me to continue upwards of two minutes; but other gentlemen were of opinion that it did not last more than one. A sailor, one of the watchmen on board the ship, was thrown out of his hammock. At Paratounca it was more violent; the earth opened in many places, and water and sand were thrown up to a considerable height; all the buildings in the village were more or less damaged; one balagan was thrown down; some of the ovens (the only brick-work about the buildings) were also shaken in; and all the paintings, &c. in the church, except Captain Clerke's escutcheon, were thrown from their fastenings.

At Neizishni Kamtshatka the inhabitants were extremely terrified; nor could they explain whether the noise or the shock preceded. The situation of the town is on a neck of land formed by the discharge of the Raduga, a considerable river, into the Kamtshatka;

the bed of the former was dry, and the inhabitants ran across it toward the mountains. They, as well as the cattle, were thrown down; and the continuance of the trembling was, according to their account, near an hour; the earth opened in many places, and sunk considerably in some. The volcano Klut-[287]shefskoi emitted a vast column of black smoke; a noise like thunder seemed to issue from the bowels of the earth; the bells of the two churches rang violently; and the howling of the dogs, and screams of the people, surpassed all description, for the latter expected every moment to see the complete destruction of the town. But when the shock was over, the lost water of the river resumed its former channel, and the inhabitants returned to their dwellings. Not a single brick chimney or oven was left standing. The altar of one of the churches was separated from it about a foot, inclining a contrary way; and the greater part of the balagans were thrown down.

It is remarkable, that the inhabitants of the village at the foot of the burning mountain only heard the noise, and did not feel the shock; nor did it cross the mountains to the western shores of the peninsula."

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-1-2
116, 177, 276, 789

"Notwithstanding the Kamtschadales have renounced most of their former superstitions, they still retain a firm belief in the supernatural powers of the schamans. A Kosak once profited by this credulity to regain his stolen property in a very ingenious manner. While on a journey with several Kamtschadales, he had some of his tobacco stolen from him, and, after questioning every individual separately, he was unable to discover who was the thief. He accordingly took some sticks, and making them of equal lengths, gave each of them one, with the assurance, that the stick of the thief would infallibly grow longer by the [68] power of schamanary. This unpleasant intelligence had such an effect on the imagination of the thief, that he actually conceited that his stick did increase in length, and thought to relieve himself from this dilemma by breaking a piece off. The next morning, every Kamtschadale carrying back his stick, the thief was instantly discovered. He was now obliged to confess the theft, and make restoration. His apology was, that all his own tobacco being gone, he had no money to buy more, and could not dispense with this necessary. Tobacco was remarkably dear at that time in Kamtschatka, a single pound costing a hundred rubles; and yet the inhabitants of this place sacrificed every thing to the indulgence of their passion for this intoxicating herb. Its ordinary price on a fresh supply is only two rubles and a half.

Tobacco is one of the most lucrative branches of trade in these parts, and always finds a ready sale; for there is not a tribe or nation having any intercourse with the Russians, which does not smoke, chew, and take snuff. The Burats, Jakuts, Koraks,

28: Sarytschew--67-68 T-1 (1789-90) 1806 Kamchadal-2
116, 177, 276, 789

Jakugirens, and Tschukschens, like the strong Tscherkapian tobacco, and are not fond of that which grows in the country of Irkutsk. They smoke it with a mixture of half saw-dust; but the Kamtschadales and Aleutians only chew tobacco and take snuff."

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

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6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

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View of the village of Sedanka, early 20th century.

The development of trade gave rise to the exploitation of the Itel'mens by merchants. These gave the Itel'mens goods on credit, often against their will; then, if the debt was not paid in time, they doubled or tripled the sum. Often, an Itel'men would have to pay as long as he lived for some small article, such as a knife. This type of trade did not disappear even after the formation of the Russo-American Company (1799). The company sold its wares at prices 10 times higher than their actual value. By the 1860's, the indebtedness of the Itel'mens to this company had risen to the grandiose sum of 150,000 rubles. 175 439 426

The Itel'men economy remained essentially subsistence. The fishing catch went solely for the satisfaction of the fishermen's needs, and none of it was sold. The only articles that had commodity value were furs. Villages were governed by elders, elected by the villagers and approved by the Russian administration. Very often the post of elder was hereditary. Survivals of clan organization were preserved among the Itel'mens until the 20th century. These included elements of collective production and distribution of food products—collective fishing by means of fishtraps, collective seal hunting, division of the carcass of a whale cast up on the shore, the custom of mutual aid, etc. 175 [433] [622] [648] [178] [614] [476]

The first efforts at introducing agriculture were made after the founding of a monastery (the Uspenskaya Pustyn') on Kamchatka, in the first quarter of the 18th century. In the 1740's the first group of Russian peasants was resettled in Kamchatka. Further groups of settlers followed, but agriculture enjoyed small success. The administrative method of introducing agriculture among the Itel'mens could yield no appreciable results with the primitive agricultural techniques of that time. The products of agriculture therefore held a small place in Itel'men economy. Gardening was more successful. In the second half of the 19th century, all Itel'men villages had small gardens, producing potatoes, turnips and horse-radish. But even this gardening was negligible in scope and extremely primitive. The natives were unskilled in tending plants; they dug the soil with wooden hoes, did not know about watering, and so on. 175 648 241 [792]

Cattle were first brought to Kamchatka in 1733, and again, from time to time, in succeeding years. The livestock was kept grazing all year; there was little preparation of hay. Horses were also left to their own devices, and became so wild that they were difficult to catch. They were used chiefly in autumn as riding and pack animals. Wheel transport, such as the cart, 175 648 231

7:Lesseps T-3 (1787-88)1790 Kamchadal

278/825 this induced them to make uſe of it. This animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177/771/793 The Chriſtian religion was introduced into this country by the Ruſſians; but the inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 upon the clergy, whoſe buſineſs it is to en-
771 lighten their ignorance. But are theſe cle-
793 rical miſſionaries ſufficiently informed them-
ſelves? They have no opportunity it muſt be acknowledged for profound ſtudy, and probably it is not required of them, as it is common enough to ſee a Kamtſchadale admitted to this dignified office.

177 Theſe popes are all under the authority
793 of a protapope, or high prieſt, reſident at Nijenei, and he again is ſubordinate to the archbiſhop of Irkoutſk, who alone ordains and appoints the clergy to their cures, ſo that they are all obliged to reſort to this ſettlement. The length and perils of the journey are conſidered perhaps as a kind of initiation; and without any other merit or examination, they probably receive holy orders: it is certain they return neither wiſer nor better. Theſe divines are then ſent to their places of deſtination; the

time

7:Lesseps T-3 (1787-88)1790 Kamchadal

793/177 time they continue is not limited, and depends on the will of their chiefs.

794 There are eight principal churches in Kamtſchatka: Paratounka, Bolcheretſk, Jchinſk, Tiguil, Vercknei, Klutchefskaïa, and two at Nijenei; to theſe may be added the church of Ingiga, in the country of the Koriacs.

The diſtrict or pariſh of Paratounka includes ſeven oſtrogs and the Kurilles iſlands; viz. the oſtrog of the ſame name, Saint Peter and Saint Paul, Koriaki, Natchikin, Apatchin, Malkin, and Bolcheretſk. The number of pariſhioners contained in theſe oſtrogs, does not exceed four hundred; and including the Kurilles iſlands, the general calculation is not more than ſix hun-
793 dred and twenty Chriſtians. The rector of Paratounka is allowed by the empreſs a

ſalary

793 ſalary of eighty roubles, and twenty *pouds* * of rye flour. His pariſhioners of conſequence, pay no tythes; but he receives alms and other caſual emoluments attached to his church. For a marriage, a chriſtening, or a burial, theſe prieſts demand whatever they pleaſe. There is no regulation in this reſpect, and every thing is governed ſolely by their caprice, which occaſions conſiderable impoſitions and abuſes. In general however, they endeavour to proportion their demands to the abilities of their pariſhioners, a diſcretion that is entitled to applauſe.

651 R 177 .65 The Kamtſchadales are free. They are ſubject only to an annual tribute to Ruſſia, which conſiſts, as I have already ſaid, in various kinds of furs; ſo that the produce of their chace, turns almoſt entirely to the

* A Ruſſian weight equal to about thirty-three pounds.

advantage

7:Lesseps T-3 (1787-88)1790 Kamchadal

000 over the remembrance of all the pleasures of the day.

The next day I was invited to the house of the protapope, uncle to the bride, where the entertainment was similar to that of the
177 preceding one, except the fire-work. I have
793 already observed, that the protapope is chief of all the churches in Kamtschatka. The clergy throughout the peninsula are subordinate to him, and he has the decision of all ecclesiastical affairs. His residence is at Nijenei. He is an old man, not entirely deprived of his vigour, with a long white beard which flows down upon his breast and gives him a truly venerable appearance. His conversation is sensible, sprightly, and calculated to gain him the respect and affection of the people.

177 There are two tribunals at Nijenei, one
692 that concerns the governments, and the other

takes

231 go along, an annoying habit of which it was impossible to break them. Their ordinary load is from six to seven pood.[1]

133 It was not long before the presence of some large poplars ahead,
361 combined with certain whiffs of decaying fish, to which no description
491 can do justice, warned us that we were in the neighbourhood of a river; and the howls of sledge-dogs presently greeted us as we arrived at the settlement of Gunal. We found some of the inhabitants engaged in making a bridge,—really a very creditable affair, as the river here is about twenty-five yards broad, with a channel some six feet or more in depth. Above the village this stream—the Bolchaia-reka, or Great Bolcheresk River—splits into two or three branches, which reunite a quarter of a mile lower, after having received two rapid, but shallow little affluents from the west.

144 Gunal is a most picturesquely-situated little hamlet of about
161 twenty huts, and has a population of ninety-four souls, who are
177 all, without exception, the descendants of Russians who established
361 themselves here with Kamschatdale wives in the last century. The latter people are now rare as a pure race, excepting upon the
771 western side of the peninsula. The Gunalians are all Christians,
793 and have built themselves a church,—a small log-cabin surmounted with a cross. Within the same enclosure, but separate, just as in Northern Sweden, is a little belfry with a single bell, time-worn and defaced. Owing to its inaccessibility, we were unable to read the inscription with which it was adorned. The church is parsonless. There are but three popes for the whole of the vast district lying between Petropaulovsky and the mouth of the Kamschatka River. Here the nearest is at Melcova, a hundred versts or more away; and once in every four months he comes in, marries and buries such of his parishioners as need it, holds service, and departs. He has not much to do, for the people are both apathetic and long-lived. In the little churchyard hard by there were scarcely twenty graves. They were marked by Russian crosses with a little

[1] A pood is equal to 36 lbs. English.

22: Guillemard T-2 (1882) 1886 Kamchadal

000 flood at one of their ancient burial-places,—a treasure that I joyfully accepted.[1]

We had taken up our quarters at the house of the head-man, and on my return thither I found that the pope had arrived to pay us a visit. His appearance was not prepossessing, and unkempt hair, a very fully-developed squint, and a total absence of conversation rendered him decidedly uninteresting as a companion. But he brought us two remarkably fine cabbages as a present, for 563 793 R 177 .79 which unaccustomed luxury we felt very grateful. We learnt that there were only nine priests or popes in the whole of Kamschatka. Like the doctors, they are paid by the Government, but they also receive tithes in kind from the people. They come for the most part from Siberia, and socially rank little, if at all, above the peasantry. This gentleman, for example, had married the sister of one of the horse-boys we had brought with us from Petropaulovsky to Sherowmy, who had been sable-hunting with Jacof Ivanovitch at the Kronotsky Lake during the preceding 000 winter. We called on her to thank her for the present, and found her a homely litttle woman with a much larger fund of conversation than her husband. On leaving the house a grey-bearded old man rushed out upon me, seized and kissed my hand, embraced me, patted me on the back, and poured out a torrent of unintelligibility which led me to the extremely English conclusion that he was drunk. I had wronged him. Afanasi was at hand, and gave me a *précis* rendering of his speech. He was merely expressing his delight at meeting with a European traveller!

The doctor had arrived to pay us another farewell visit when I again reached our house. We had many attractions for him; some of them in bottle. Poor old fellow; his sorrow at parting with us was too much for him, and when we turned round and discovered the Hennessey at the lowest ebb, it gave us almost pain to have to sign to Louis to remove it.

[1] *Vide* "Journal Anthrop. Inst.," Vol. xvi., No. 1, p. 21.

24: Lansdell--638 M-2 (1879) 1882 Kamchadal
116, 177, 793

"I saw, at Khabarofka, and on the steamer, another Kamchatdale, of less presentable appearance-a cleric, wearing his hair in a queue, perhaps for convenience in travel. He was taken, as a boy of 10 years old, to Irkutsk to be educated; afterwards sent to be minister in a church in Russian America, and subsequently became priest of Okhotsk. He is now near Blagovestchensk, and when I saw him was sick. He looked a poor miserable creature, and was pointed out to me by Baron Stackelberg, of whom he had openly asked an alms, as 'ce pauvre diable.' He appeared much pleased with some books I gave him, but was altogether about the poorest specimen of a priest I saw in Russia."

29:Cochrane T-2 (1821-22)1824 Kamchadal

181 the extreme of oppression from neglect and mal-
435 administration, for one hundred and twenty years, should not have become wiser and more economical in their habits; on the contrary, one might suppose they were a people but yesterday discovered. They will part with the most valuable furs for a trifling article, or a glass of spirits.

177 I need say nothing of their superstitions, as they
793 are nearly at an end. They now place as much re-
756 liance upon the efforts of the priests, as they formerly did on their shamanes, with this difference only, that to the latter they give many furs, while to the former they only gave a hearty meal.

183 Of laws they have but few of their own, their
554 motto being something like that of the Chinese,
692 "to return evil for evil, and good for good." At
R present they await the arrival of the Chief, of an
177 Officer, or of a Commissary, with a great deal of
.69 ceremony, giving him the best lodging, and acknowledging, if I may so say, his supremacy. Formerly, it appears, they lived in a perfect state of equality and independence of each other, age and expertness in hunting alone being held in estimation or respect.

177 The Kamtchatdales are now supplied with culi-
181 nary utensils and every thing they can require by the Russians; and as they live exactly in the same manner, and in the same description of houses with the latter, I need only refer my readers to an account of a Russian village; in their outward ap-

29:Cochrane T-2(1821-22)1824 Kamchadal

177 pearance there is no difference whatever. They
181 seem a race disburthened of all care and consideration for the future, and entirely resigned to any fate which may await them, whether it be oppression or starvation.

177 In my opinion, and I speak it most sincerely, the
771 aborigines have not derived much benefit from the
793 conquest of their country by the Russians, as even their conversion to Christianity has done little other good, than entitled them to the name of Christians. The great number of priests and deacons (twenty-six in number) would, I presume, suggest an expectation of more learning and piety in this part of the world than in other semi-barbarous places; but really I have never seen any good effects from the labours of these reverend gentlemen. Certainly there is no population corresponding to the number of
161 ecclesiastics, as will appear on considering that the
231 whole Kamtchatdale population does not exceed,
563 male and female, two thousand seven hundred and sixty, while their dogs amount to two thousand two hundred and eight. The number of Russians is one thousand two hundred and sixty. The inhabitants north of Tygil and Nishney Kamtchatks, are four hundred and ninety-eight, while in the Koriak villages there are one hundred souls; making a population of four thousand five hundred and seventy-four, men, women, and children, Rus-
162 sians, Kamtchatdales and Koriaks. Whether the original population has not decreased in a surpris-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 cial fairs to be held upon a certain day at certain
793 places. Among the people who also travel round
759 the peninsula of Kamtchatka are doctors and par-
661 sons. They are both extremely troublesome, for while the one affects to prepare the soul, and the other the body, both I believe are more concerned in fleecing the thoughtless aboriginal, and in depriving him of the means of support.

177 The quantity of convicts sent amongst a people
563 so susceptible of imposition is also a serious grievance. The convicts, as Russians, have an indirect ascendancy over the Kamtchatdales, which is exercised in a most intolerant and infamous manner. The convicts frequently desert, and commit every species of villany and outrage, even to the fomenting of insurrections. This was the case during my stay in the peninsula; nor are the Kamtchatdales so dull, but that they remember Count Beniofsky
000 with horror. If the government of Russia really feel interested in the prosperity of Kamtchatka, and I don't doubt it, they have an easy mode of effecting it, by transplanting thither two or three thousand Yakuti, with their cattle. They are an industrious, ingenious, and peaceable people; and, being excellent herdsmen, they could not, of course, but thrive in a country of such extensive and rich pastures.

I cannot refrain from mentioning what appears to me a most desirable plan of administering a direct, and yet in-expensive relief to these poor people: Let the yasack be totally abolished, and let

29:Cochrane T-2 (1821-22) 1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert
563 to one or two points not hitherto dwelt on. The
793 children of the natives receive no education, and
871 the children of the Russians but little more. There
R certainly is a school existing in St. Peter and St.
177 Paul's, governed by a priest, and regular school-
.87 master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see
563 how the boys could be kept alive. Of the clerical
793 gentlemen themselves, I may observe, that they
R maintain a great distinction between practice and
177 precept. They are very numerous: I know not what
.79 so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

29:Cochrane T-2 (1821-22) 1824 Kamchadal

563 sides trade. Of late the Emperor has given the cler-
793 gy an allowance of flour as well as a regular salary,
R and it may therefore be hoped that the natives will,
177 at least, be so far benefited as to have fewer of their
. 79 visits, except on their spiritual concerns.

Whether the Russian government will pay any
000 attention to the serious and deplorable situation of the peninsula of Kamtchatka is of no personal consequence to me, though I may well feel a strong interest concerning a place in which I resided for more than a year, and where I married. The ceremony was attended with much more pomp and parade than if it had been celebrated in England: it took place on the 8th of January, and I certainly am the first Englishman that ever married a Kamtchatdale, and my wife undoubtedly the first native of that peninsula that ever visited happy Britain.

The winter was passed in a constant round of hospitality and comfort, and hardly any thing re-
133 markable occurred to call for observation. Three shocks of earthquakes were felt, two of them very severe: one threw the sand up from the banks of the river Kamtchatka, and quite annihilated the snow; the Kliuchefska Sopka also
132 emitted flames and lava. The snow began to disappear at St. Peter and St. Paul's in the beginning of May. By the middle of the month one of the transports sailed from the port to Nishney Kamtchatsk, reaching it in five days; and by the latter

[in the winter of 1821-22--Analyst]

793 time they continue is not limited, and de-
177 pends on the will of their chiefs.

794 There are eight principal churches in Kamtſchatka: Paratounka, Bolcheretſk, Jchinſk, Tiguil, Vercknei, Klutchefskaia, and two at Nijenei; to theſe may be added the church of Ingiga, in the country of the Koriacs.

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793 dred and twenty Chriſtians. The rector of Paratounka is allowed by the empreſs a

ſalary

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237 262 251 those made of timber, in that they are much lighter and go swifter. Of the seals' fat both *Russians* and *Kamtschadales* make candles; and besides the natives esteem it such a delicacy that they can have no feast without it. The flesh they boil or dry in the sun; but if there are great quantities, they smoke or bake it in the following manner: They dig a large pit in proportion to the quantity of flesh or fat, and pave the bottom with stones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the ashes, then lay at the bottom a layer of green poplar wood, upon this another of seals' flesh or fat, each separately; and thus alternately wood and flesh until the pit be quite full. They then cover it with grass and earth, to keep in the heat; and after some hours they uncover it, take out the fat and flesh, and lay it up for the winter. Both flesh and fat thus prepared is much more delicate than what is boiled; besides, it keeps without spoiling for a whole year.

825 796 782 When they have picked all the flesh from the heads of the seals they shew them all the respect that they would to a particular friend that visits them. I saw this ceremony in the year 1740 at the little fort of *Krodakighe*, which stands upon a river of the same name that falls into the Eastern Ocean. It was performed in the following manner: They brought in the skull or head of a seal, bound round with the sweet grass, and placed it upon the floor. Then a *Kamtschadale* entered with a bag filled with the sweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtschadales* rolled in a great stone, and set it opposite to the entry of the hut, about which they laid several stones; and two others tore the sweet herb, and made it into small bunches. The great stone was to signify the sea, the smaller the waves, and the bunches of the sweet herb the seals. This being done, they took three dishes of caviar mixed with kipre, hurtleberries, and seals'

fat

fat. This they ſqueezed into balls, in the middle of which they preſſed the ſweet herbs which were made to repreſent the ſeals: out of the birch bark they made little boats, which they filled with theſe balls made as above, and covered them with herbs. 825 796 782

After ſome time they took theſe boats and balls and toſſed them to and fro over the ſtones as if over waves, that the other ſeals might ſee with what reſpect the *Kamtſchadales* treated their friends, and conſequently might the more willingly fall into their hands. After this they placed the ſeals made of the ſweet herbs near to the great ſtone, or ſea, and all went out of the hut; but one old man, after he had ſet upon the threſhold a ſmall diſh with their broth which he had carried behind them, entered into it again, all the aſſiſtants crying aloud four times the word *Lignouleghe*. They could not tell what this term meant; nor could they give any other reaſon for their ſo crying out, but that their fathers did ſo. After this they again rolled the birch boats upon the ſtones; and going again out of the hut cried, as before, *Kouneouſhite aloulaighe*; that is, May the wind blow towards the ſhore. For while this wind blows a great deal of ice is driven towards the land, which is favourable for their killing the ſea animals. Returning into their huts, they rolled their birch boats a third time over the ſtones. They then put the ſkulls of the ſeals into a bag, and every fiſher preſent put in alſo a little of the ſweet graſs, with his name and ſome particular ſentence; that the ſeals might know how they had entertained them, and what valuable preſents they had made them.

Having, as they thought, by their entertainment and preſents, ſhewn all reſpects to their gueſts, they brought them out to the ſtair-head, where an old man put ſtill ſome more of their gruel into the bag, deſiring them to carry that to their friends that had been drowned at ſea. Then two *Kamtſchadales* who had been principally employed in this entertainment, took the bowls that

were

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

825 were filled with gruel and the ſeals made of graſs, and gave one
796 to each fiſher. They then went all out of the hut, and cried
782 *Uenic*; a word they uſe in calling to one another when they go to kill the ſeals or other ſea animals. Then taking out the ſeals made of graſs they threw them into the fire, praying them to make them frequent viſits; after which, returning into the hut, they put out the fire, and eat the gruel that was in the bowls.

136 The ſea horſe is but ſeldom ſeen about *Kamtſchatka*, and then only in the moſt northernly places. The moſt are caught near the cape of *Tchukotſkoi*, being both larger and more numerous there than any where elſe. Their teeth are what we commonly call fiſh-bone, the price of which depends upon their largeneſs or weight: the deareſt are thoſe that are about twenty pounds; but theſe are ſeldom met with, or even ſuch as weigh ten or twelve pounds, the common weight being five or ſix pounds.

The ſea lion * and cat, in their uſual ſtructure, differ very little from the ſea horſe and ſea calf, and are therefore to be reckoned of the ſame kind.

Some call the ſea lions ſea horſes, becauſe they have manes. In their ſhape they are like the ſea calf; and their necks are bare, excepting a ſmall mane of hard curled hairs: the reſt of their body is covered with a cheſnut-coloured hair. They have a middle-ſized head, ſhort ears, a ſnout ſhort and drawn up like a pug dog's, great teeth, and webbed feet. They are found moſt frequently about rocky ſhores or rocks in the ſea, upon which they climb very high, in great numbers. They roar in a ſtrange, frightful manner, much louder than the ſea calf; and they are thus far of uſe to people at ſea, that in foggy weather, by their roaring, they warn them of rocks or iſlands being near, as few rocks or iſlands in this part of the world are without theſe animals.

* Leo marinus. STELLER.

Although

CHAP. XII.

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Of their SHAMANS, *or Conjurers.*

THE *Kamtſchadales* have none who are profeſſed *Shamans*, or conjurers, as the neighbouring nations have; but every old woman is looked upon as a witch and an interpreter of dreams. In their conjurations they whiſper upon the fins of fiſhes, the ſweet graſs, and ſome other things; by which means they cure diſeaſes, divert misfortunes, and foretel futurity.

787 They are very great obſervers of dreams, which they relate to one another as ſoon as they awake in the morning, and judge from thence of their future good or bad fortune; and ſome of theſe dreams have their interpretation fixed and ſettled. Beſides this conjuration they pretend to chiromancy, and to foretel a man's good or bad fortune by the lines of his hand; but the rules which they follow are kept a great ſecret.

CHAP. XIII.

716

Of their CEREMONIES.

THE *Kamtſchadales* always celebrated three days in the month of *November*, which is hence called the month of Purification. *Steller* imagines, that this was firſt inſtituted by their anceſtors to return thanks to God for all his bleſſings; but that afterwards, through the ſtupidity of theſe people,

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

people, it has been perverted by foolish and ridiculous ceremonies; and this appears the more probable, because that, after their summer or harvest labour is over, they look upon it as a sin to do any work, or make any visits, before this holiday, which if any one neglects he is obliged to expiate it at that time, if not before. From hence we may see that the ancestors of this people were accustomed to offer up the first fruits of their summer labours to God, and to make merry with one another. The northern and southern *Kamtschadales* have different ceremonies in the celebration of their holidays, which are extremely silly, and consist of many ridiculous anticks. I shall give a slight sketch of one of these assemblies in the southern *Kamtschatka*. 796

After many strange ceremonies they introduce a little bird and a fish, which they roast upon the coals, and divide amongst them, when every one throws his share into the fire as a sacrifice, or an offering, to those spirits which come to their feasts; then they boil dried fish, the broth of which they pour out before their image, and eat the fish themselves; and then take the birch-tree out of the hut, and carrying it to their magazines, lay it up there to be kept for the whole year. Thus ends the festival.

CHAP. XIV.

Of their FEASTS *and* DIVERSIONS. 527 574

THEY make feasts when one village entertains another, either upon the account of a wedding, or having had a plentiful fishing or hunting. The landlords entertain their guests with great bowls of opanga, 'till they are all set a vomiting; 273

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

Village, 18th-century engraving.

At the time of the first Russian acquaintance with Kamchatka the Itel'mens maintained a primitive-communal order. "Until its subjection to Russian rule," wrote Krasheninnikov, "this wild people lived in a state of complete freedom; it had no masters, was subjected to no laws, and paid tribute to no one. Old and courageous people had superior position in every ostrozhka, but this meant only that their advice was hearkened to. Generally, there was equality among them, no one could issue commands to anyone else, and no one had the right to mete out punishment on his own to anyone." Every village was inhabited by members of one clan. The semidugout housed several related families; the number of its inhabitants sometimes was as high as 100. They were bound by collective production and consumption. The custom of vendetta prevailed.

The woman held a high position in family and social life. Many features of matriarchy persisted in the Itel'men social system. These included the husband's moving into the wife's home, or at least temporary residence in the father-in-law's house; marriage by working for the bride, which involved the groom's moving to her home and performing various tasks. But the matriarchal organization was already in a state of disintegration in the beginning of the 18th century. Constant wars among individual clans and with neighboring peoples, waged for the sake of seizing women and captives, who were partially turned into slaves, intensified this process. The arrival of Russians in Kamchatka led to rapid changes in the economy and life of the Itel'mens.

The religious notions of the Itel'mens, according to 18th-century explorers, and primarily Krasheninnikov, had many elements in common with the beliefs of the Koryaks and Chukchi. These included the idea of the raven-creator, rituals and celebrations connected with the annual economic cycle, whale, bear and other ceremonials, consisting of "treating" and "giving gifts" to the animals killed in the hunt. The most important of these was the fall festival, ending in "purification"—passing through hoops of birch twigs. The Itel'mens believed in evil mountain and forest

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions. 577 784

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. 825

This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries. 797 R. 177 .79

CHAP.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

fefs any thing more than what they had done voluntarily before. 651

Since this time all things are intirely quiet there; and it is hoped they will continue so, affairs being brought into such order, that the natives themselves could not wish for more, being only obliged to pay their taxes, without the least oppression, which consist only in one skin for every man of such creatures as he is used to hunt, such as sables, foxes, or sea beavers. Justice, except in criminal cases, is administered by their own chieftains. The Cossacks are forbidden to demand former debts, which they pretended were due from the natives. Their principal happiness consists in the conversion of several of them to Christianity; to which end her Majesty has been graciously pleased to appoint missionaries and schoolmasters, who keep schools in the principal villages for the instruction of the youth, both natives and Cossacks; and they begin now to be so much improved, that they even laugh at their former barbarity. 692 797 R. 177 .65

CHAP. V.

The present STATE *of the* FORTS *and* VILLAGES *of* Kamtschatka, *with a particular Account of each.* 361 R. 177 .71

THERE are five *Russian* forts in *Kamtschatka*: the 1st called the *Bolscheretskoi*, the 2d upper *Kamtschatka*, 3d the lower *Shaltolski*, 4th the haven of *Petropaulauskay*, and 5th on the river *Tegbil*. The *Bolscheretskoi* fort stands upon the northen bank of the *Bolschaia-reka*, or Great River, between the mouths of the rivers *Beestra* and *Golsoftka*, 33 versts from the *Penschinska* sea. The fort is 70 feet square; the east and north sides are fortified with palisades, the south and west with different

6: Antropova E-4 (no date) 19 4 RY3 Kamchadal RY3

105 The Itel'mens believed in evil mountain and forest
[176] spirits, the sea-spirit, Mitg, good protecting spirits, etc. Anthropomorphic images of the spirits were usually made of wood.

[173] The central figure of Itel'men mythology was the raven-creator, Kutkh. But he was not held in esteem, and various comical and obscene stories were told about him.

[164] The bodies of dead adults were given to the dogs to eat; children were
[156] buried in hollow trees. The Itel'men shamans did not have any special clothing or tambourines.

[199] In the middle of the 18th century, the Itel'mens were converted to Christianity, but they continued to cling to their animistic ideas.

175 648 Information about the abundance of fur on Kamchatka received from Luka Morozko and Atlasov attracted the attention of the tsarist government and the Yakutiyan governors.

A special official—a prikashchik—was appointed to collect taxes. The Kamchatka prikashchiks, who were virtually the full masters of the peninsula, often abused their power. In addition to the fur-tax, they exacted from the population great quantities of furs for their own enrichment. The predatory extermination of fur animals, and most of all, sable, sharply reduced the catch, and the Itel'mens were often unable to pay the tax in full. The arbitrary extortion of cured fish, "sweet grass" for wine-making, lily tubers, berries, cedar nuts, seal blubber, skins, and even sleds, boats and clothing, for the benefit of the tax collectors became systematic. In addition to all this, the natives suffered from exploitative trading and its consequences—debt slavery.

175 648 669 The Itel'mens' struggle against extortions and oppression expressed itself at first in attacks on individual representatives of the tsarist government and raids on the tax treasury. Large uprisings broke out in 1706, 1711 and 1731.

The rebellion of 1731 involved nearly all the Itel'mens. After its suppression, a special "investigating office" was sent to the area to look into its causes. The leaders of the rebellion were executed. Some of the officials were also punished.

[161] The quelling of rebellions by armed force and the arbitrary rule of the
[731] local officials reduced the Itel'men population. But the principal reason for the population decline was the epidemics of smallpox, typhus and other
[614] diseases which devastated entire districts. The remnants of the various clans could no longer exist independently and united into larger territorial
[178] units. Thus, instead of the former clan villages, new settlements sprang up, inhabited by members of various clans. New villages were also created
[728] by compulsory resettlement. Thus, after the rebellion of 1731, the inhabitants of the village of Klyuchi were resettled in Kozyrevsk; the inhabitants of Nachiki were moved there from the western coast of the peninsula.

175 648 556 426 The system of tax collection through the village elders and the development of barter with Russians resulted in the accumulation of private property in the hands of some individuals. As early as the 1730's, there were toyons (elders) who lent sables to their kinsmen to enable them to pay their tribute, in exchange for subsequent work.

175 648 The economic condition of the Itel'mens did not improve in the latter half of the 18th century. This was due above all to the system of tax collection and the tyranny of the local authorities. Taxes were collected, not from the present population, but according to lists, which included men long dead. The living thus had to pay taxes for dead relatives. Extremely onerous, too,
[166] was the imposition of the duty to transport numerous officials, as well as cargo, without compensation all over the peninsula. This took the men away from their occupations and condemned them to frequent periods of famine.

7:Lesseps T-3 (1787-88)1790 Kamchada'

000 found, and feels an inſtant deſire to repoſe in him all its confidence. The ſight of M. Steinheil imparted to me this delicious ſenſation. There was in his converſation, from the very firſt moment, an irreſiſtible attraction. I felt a ſort of craving to ſee him, to talk with him; it had the effect of a charm, though his French, as I have ſaid, was not the moſt pure, and was pronounced with the German accent. I ſpent the day of 4 February with the baron, and in the evening M. Kaſloff arrived as he had previouſly informed me.

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The oſtrog of Machoure, before the introduction of the ſmall-pox, was one of the moſt conſiderable in the peninſula; but the ravages of this cruel diſeaſe, have reduced the number of inhabitants to twenty families.

All the Kamtſchadales of this village,

7:Lesseps T-3 (1787-88)1790 Kamchadal

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756
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men and women, are chamans, or believers in the witchcraft of these pretended sorcerers. They dread to an excess the popes or Russian priests, for whom they entertain the most inveterate hatred. They do all they can to avoid meeting them. This is sometimes impossible, and in that case, when they find them at hand they act the hypocrite, and make their escape the first opportunity that offers. I attribute this fear to the ardent zeal which these priests have doubtless shown for the extirpation of idolatry, and which the Kamtschadales consider as persecution. They accordingly look upon them as their greatest enemies. Perhaps they have reason to believe, that in wishing to convert them, the overthrow of their idols was not the only thing these missionaries had in view. These popes probably set them no example of the virtues upon which they declaim. It is suspected that their object is the acquisiton of wealth,

rather

7:Lesseps T-3 (1787-88)1790 Kamchadal

797/177 rather than of proſelytes, and the gratification of their inordinate propenſity to drunkenneſs. It is not therefore to be wondered at that the inhabitants retain their
776 ancient errors. They pay a ſecret homage
782 to their god *Koutka**, and place in him ſo
224 entire a confidence, that they addreſs their
756 prayers excluſively to him when they are deſirous of obtaining any boon, or of engaging in any enterpriſe. When they go to the chace, they abſtain from waſhing themſelves, and are careful not to make the ſign of the croſs: they invoke their Koutka, and the firſt animal they catch is immediately ſacrificed to him. After this act of devotion they conceive that their chace will be ſucceſsful; on the contrary, if they were to croſs themſelves, they would deſpair of catching any thing. It is alſo a part of their ſuperſtition to conſecrate to

* This object of their worſhip is accurately deſcribed in Steller,

these vices occasion frequent quarrels and wars among them
ſometimes with their neighbours, not from a deſire of increaſing 578
their power, but from ſome other cauſes; ſuch as the carrying 585
off their proviſions, or rather their girls, which is frequently
practiſed as the moſt ſummary method of procuring a wife.

Their trade is likewiſe not ſo much calculated for the acquiſition 439
of riches as for procuring the neceſſaries and conveniencies of life.
They ſell the *Koreki* ſables, fox and white dog ſkins, dried
muſhroons, or ſuch trifles; and receive in exchange cloaths made
of deer-ſkins and other hides: among themſelves they exchange 438
what they abound with for what they want, as dogs, boats, diſhes,
troughs, nets, hemp, yarn, and proviſions. This kind of barter 437
is carried on under a great ſhew of friendſhip; for when one 576
wants any thing that another has, he goes freely to viſit him, and
without any ceremony makes known his wants, although perhaps he
never had any acquaintance with that perſon before: the landlord
is obliged to behave according to the cuſtom of the country;
and bringing whatever his gueſt has occaſion for, gives it him.
He afterwards returns the viſit, and muſt be received in the ſame
manner; ſo that both parties have their wants ſupplied.

Their manners are quite rude: they never uſe any civil ex- 576
preſſion or ſalutation; never take off their caps, nor bow to one 157
another; and their diſcourſe is ſtupid, and betrays the moſt con-
ſummate ignorance; and yet they are in ſome degree curious, and
inquiſitive upon many occaſions.

They have filled almoſt every place in heaven and earth with 771
different ſpirits, which they both worſhip and fear more than
God: they offer them ſacrifices upon every occaſion, and ſome
carry little idols about them, or have them placed in their
dwellings; but, with regard to God, they not only neglect to
worſhip him; but, in caſe of troubles and misfortunes, they
curſe and blaſpheme him.

They keep no account of their age, though they can count as 802
far as one hundred; but this is ſo troubleſome to them that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

802 without their fingers they do not tell three. It is very diverting to ſee them reckon more than ten; for having reckoned the fingers of both hands they claſp them together, which ſignifies ten; then they begin with their toes, and count to twenty; after which they are quite confounded, and cry, *Matcha?* that is, Where ſhall
805 I take more. They reckon ten months in the year, ſome of which are longer and ſome ſhorter; for they do not divide them by the changes of the moon, but by the order of particular occurrences that happen in thoſe regions, as may be ſeen in the following table:

1ſt. Purifier of ſins; for in this month they have a holiday for the purification of all their ſins.
2d. Breaker of hatchets, from the great froſt.
3d. Beginning of heat.
4th. Time of the long day.
5th. Preparing month.
6th. Red fiſh month.
7th. White fiſh month.
8th. Kaiko fiſh month.
9th. Great white fiſh month.
10th. Leaf falling month.

This laſt month continues to the month of *November*, or that of the purification, and it is the length of almoſt three months; however, theſe names of the months are not the ſame every where, but are only proper to the inhabitants upon the river *Kamtſchatka*: the inhabitants of the northern parts give them different names, ſuch as,

1ſt. The month of the rivers' freezing
2d. Hunting month.
3d. Purifier of ſins.
4th. Breaker of hatchets, from the great froſt.
5th. Time of the long day.
6th. Sea beavers' puppying time

7th. Sea

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught.

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled.

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe.

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not

136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tunguſi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkovoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kuriſki* languages.

802 without their fingers they do not tell three. It is very diverting to ſee them reckon more than ten; for having reckoned the fingers of both hands they claſp them together, which ſignifies ten; then they begin with their toes, and count to twenty; after which they are quite confounded, and cry, *Matcha?* that is, Where ſhall
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5th. Time of the long day.
6th. Sea beavers' puppying time

7th. Sea

7th. Sea calves' puppying time. 805

8th. Time when the tame deer bring forth their young.

9th. When the wild deer bring forth.

10th. Beginning of the fishery.

Their division of time is pretty singular; they commonly divide our year into two, so that winter is one year, and summer another: the summer year begins in *May*, and the winter in *November*.

They do not distinguish the days by any particular appellation, nor form them into weeks or months, nor yet know how many days are in the month or year. They mark their epochs by some remarkable thing or other, such as the arrival of the *Russians*, the great rebellion, or the first expedition to *Kamtschatka*. They 212 have no writings, nor hieroglyphick figures, to preserve the memory of any thing; so that all their knowledge depends upon tradition, which soon becomes uncertain and fabulous in regard to what is long past.

They are ignorant of the causes of eclipses, but when they 821 happen, they carry fire out of their huts, and pray the luminary eclipsed to shine as formerly. They know only three constellations; the Great Bear, the Pleiades, and the three stars in Orion; and give names only to the principal winds.

Their laws in general tend to give satisfaction to the injured 681 person. If any one kills another, he is to be killed by the rela- 754 tions of the person slain. They burn the hands of people who have been frequently caught in theft, but for the first offence the thief must restore what he hath stolen, and live alone in solitude, without expecting any assistance from others. They think they can punish an undiscovered theft by burning the sinews of the stone-buck in a publick meeting with great ceremonies of conjuration, believing that as these sinews are contracted by the fire so the thief will have all his limbs contracted.

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7th. Sea calves' puppying time. 805
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27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-1-2
116, 133, 134, 137, 782, 821

"Hot springs are very numerous, and seem scattered all over Kamtshatka; but those in the following places are the most remarkable:

Opalski, or Osernoi, situated nearly midway between the Lopatka and Bolshoiretsk, about 15 miles south of the Kamtshadal village of Yavinsk, surrounded by mountains, and at no great distance from the volcano of Opalsk. They occupy a valley of considerable extent, and are scattered to the distance of six miles, some parts of which produce detached birch trees, the sweet plant, &c.; but in general the soil is barren, composed of different coloured marl, and large stones which appear to have been scattered by eruptions of some volcano. The largest hot spring is at the foot of one of the mountains; and we heard the noise that it made at the distance of near a mile before we came to it. It is about six fathom in circumference, boiling up to a considerable height; the middle appears like a cauldron; and a piece of beef placed in it was very well boiled in a short time: all around it bubbles up between large stones; it then divides into two streams, which descend over stones, and unite at the bottom with a small rivulet formed by the other springs to the north: they flow a little way to the south, then turn westward into the lake Osernoi. About the border of these springs, and the rivulet which they form, we observed petrified, or rather calcarised, foliage of the sweet plant, birch leaves, sticks, &c. of a beautiful whiteness; but so extremely delicate in their texture, that we could not preserve any, even in cotton; for they mouldered to dust. The Kamtshadals suppose this to be the habitation of some demon, and make a

27: Sauer--303-304 T-2 (1789-93) 1802 Kamchadal-2
116, 133, 134, 137, 782, 821

trifling offering to appease his wrath; without which, they say, he sends very dangerous storms. Our naturalist and Mr. Varonin, who ascended to these springs in 1790, experienced [304] a whirlwind, which tore their tent, and scattered its contents about, many of which were never found again. Ashes were scattered upon the snow about four inches deep, resembling coarse gunpowder, probably from the volcano Alaid (a solitary mountain in the sea, situated about 20 miles south-west of the Lopatka), which burns violently at this time(February 1793). It has at various intervals emitted smoke ever since 1790. The oldest inhabitant does not remember its having done so before, although tradition informs them of its violent eruptions."

Awachinskaya bay, almost opposite the *Kareemchin* fort, are two high mountains, one of which smokes almost continually, and sometimes burns. /133

The breadth of the cape of *Kamtschatka*, between the mouth of the *Keekscha* and the *Awachinskaya* bay, measures from sea to sea, by a strait line, only 255 versts; a distance much less than that between the *Tegbil* and the *Kamtschatka*.

There are a multitude of rivulets which fall into the Eastern Ocean between the mouth of the *Awatscha* northward, and the river *Kamtschatka*, and from that again to the *Anadir*; but being of small note, we shall only remark any thing that may be curious relating to them; among which may be reckoned the mountain *Shupanoveskaya*, so called from *Shupanova* a stream near which it stands. This mountain is a volcano, and has smoked at the top in several places for many years, and sometimes rumbles, but does not flame. The *Camel's Throat*, a rivulet near this hill, is remarkable for the danger of its passage through a very narrow valley, between high and steep mountains, from whence the snow is apt to tumble upon the slightest accident, even, it is said, from a strong exertion of the voice; and, falling down in vast heaps, sometimes buries passengers under it; for which reason the natives make it criminal to speak aloud as they pass through the valley: in other respects the road is very convenient. On the south side of the river *Shophead*, or *Shupanova*, near the sea shore, are a great many pillars or rocks, which appear above water, and make its entrance very dangerous; a little beyond this to the south is a bay, called *Nutrenoi*, surrounded by rocky mountains, about four versts in length and breadth; and near it, about the head of a rivulet, called *Shenmeek*, are large wells of boiling water. Out of a mountain near these springs, in many places, proceeds a steam, and the bubbling of boiling water is heard, but no springs have made their way through yet, though there are considerable fissures here and there, and the steam issues forth with the same rapidity /133 /133 823 784 /133

The channel between the *Kurilskaya Lopatka* and this island is 15 verſts in breadth; over which they paſs in ſmall boats, when the weather is fair, in three hours. This paſſage requires not only fair weather, but likewiſe a flowing tide. In the time of the ebb, the waves ſpread for ſome verſts, are rapid and white, and ſo large that even in calm weather they riſe two or three fathoms high. Both the Coſſacks and *Kuriles* have a ſuperſtitious awe and veneration for theſe waves; and when they row over them, offer them a ſacrifice by throwing chips made on purpoſe, imploring a ſafe paſſage; the pilots alſo uſe conjurations the whole way.

The ſecond *Kurilskoy* iſland, *Paromuſir*, is twice as large as the firſt. It lies north-eaſt and ſouth-weſt, and is ſeparated from the firſt by a channel two verſts broad, where one veſſel may lie in time of neceſſity, but not without danger, there being no proper place for anchorage: and if a veſſel parts from her anchor, ſhe will be in very great danger; for the ſhore here being ſteep and rocky, and the channel narrow, it is next to impoſſible for her to eſcape. There was a melancholy example of this in the year 1741, when one of our veſſels was caſt away here. This iſland is alſo mountainous, and has as many lakes and rivulets as *Schumtſchu*; and on both of them, there is no other timber than *Slanetz* and *Ernick* which are uſed by the inhabitants for fuel, and they build their huts of different kinds of wood which they find thrown on the ſhore by the waves from *America* and *Japan*; among theſe are ſometimes found pieces of ranfarn wood, of which ſeveral large one's were brought thence to me. The inhabitants of this iſland are right *Kuriles*, who came there from the iſland *Onneckoot*; but upon what account is not known. All affirm, that between the inhabitants of the two above-mentioned iſlands, and the moſt remote, commerce was formerly eſtabliſh-

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This iſland conſiſts of one rocky ridge divided by many vallies lying north and ſouth; and the mountains are ſo high that, in fair weather, they may be perceived almoſt in the middle of the paſſage between the iſland and *Kamtſchatka*.

The natives of *Kamtſchatka* were of opinion for many years, that over-againſt the mouth of the *Kamtſchatka* there ought to be land; becauſe there was always the appearance of a fog or miſt there, let the horizon be ever ſo bright. The higheſt mountains here are not higher than two verſts perpendicular; the tops are covered for the thickneſs of half a foot with a common yellow clay; but below are hard yellow rocks. The *Stanovoy* ridge is hard and entire; and the mountains upon the ſides are ſeparated by vallies, through which run ſmall rivers on both ſides of the iſland. It is obſervable in this iſland, that the mouths of all the rivers lie either to the ſouth or to the north, and from their ſprings they either run ſouth-eaſt or north-weſt.

There are no plains near the principal ridge, except the ſea-ſhore, and even there are little mountains of half a verſt, or a verſt, in circumference. Such hills are obſerved near every rivulet, with this difference, that the flatter the capes are towards the ſea, the larger are the plains behind. The very ſame thing is alſo obſerved in the vallies: if they lie between high mountains, they are leſs, and the rivulets in them alſo ſmaller; but in thoſe vallies which are between low mountains, it is otherwiſe. On the *Stanovoy* or principal ridge, wherever the mountains are ſteep and full of cliffs, there are always found lakes half a verſt, or a verſt, from the ſea-ſhore, which run by ſmall outlets into the ſea.

The mountains conſiſt of one hard blue ſtone; but where they are parallel with the ſea, there the capes are made up of a ſtrong greyiſh clean ſtone, fit for poliſhing. This circumſtance the author eſteems worthy of obſervation, becauſe he imagines the ſtone might obtain this change from the ſea-water.

133 bubbling of water is heard. Here I dug, expecting to find water; but I found a ſtratum of ſuch hard ſtone that we could not dig through it. It is probable that the waters of the warm brook, that falls into the Eaſtern Ocean, have their origin from this place, for it is directly oppoſite to the riſe of that brook: and the laſt ſtream that falls into the river *Shematche* is likewiſe thought to derive its ſource from the ſame place, as it riſes from this ridge, upon the weſt ſide, in a deep hollow, ſurrounded with ſmoking hills. The very bottom itſelf is full of boiling ſprings for near a verſt and a half; all which join at laſt in one ſtream.

In this bottom are two large wells, that deſerve particular notice; one is five, the other three fathoms' diameter; the firſt one and a half, the other one fathom deep. In theſe the water boils up with white bubbles, and makes ſuch a noiſe, that one perſon cannot hear another in the common way of ſpeaking; nay, ſcarcely when he cries aloud. The vapour is ſo thick, that one cannot ſee a man at ſeven fathoms' diſtance; and the boiling of the water is only to be obſerved by lying down upon the ground. The earth between theſe wells yields like a bog, ſo that one is in continual fear of ſinking in. The water of theſe ſprings is diſtinguiſhed from all others by a black matter, like *Chineſe* ink, that ſwims upon the top, which ſticks ſo to the fingers that one cannot without difficulty waſh it off. They have, in common with other hot ſprings, clay, lime, alum, and ſulphur, of various colours. In all the above-mentioned ſprings the water is thick, and ſtinks like rotten eggs.

The *Kamtſchadales* eſteem all the burning mountains, and places where hot ſprings ariſe, as the habitations of ſpirits, and approach them with fear; but, as the latter are the moſt dangerous, they are under the greateſt awe of them; and therefore they never willingly diſcover them to any *Ruſſian*, left they ſhould be obliged to accompany him near them. It was by chance that I heard of them after I had travelled 100 verſts from the

the place; but this natural phænomenon appeared ſo curious that I returned to examine it. The people of *Shematchinſki* village were obliged to declare the true reaſon why they had not formerly diſcovered them, and much againſt their will were forced to ſhew me the place, but would not go near it: and when they ſaw that we lay in the water, drank it, and eat things boiled with it, they expected to ſee us periſh immediately; but when they ſaw this did not happen, they told it in the village as an uncommon wonder, and were aſſured that we muſt be very extraordinary people ſince even the devils could not hurt us. 228 823

This is remarkable, that north from the mouth of the river *Kamtſchatka*, and weſt along the coaſt of the river *Oſernoi*, there are no hot ſprings, although it abounds in *Pyrites*, ſulphur, iron ore, and ſtones that yield alum and vitriol. Mr. *Steller* obſerves, that the appearance of the country of *Kamtſchatka*, and the frequent earthquakes there, give reaſon to think that it is full of caverns replete with combuſtible matter, which taking fire in the bowels of the earth produces earthquakes, and makes thoſe vaſt alterations of which we ſee numerous inſtances in rocky ſhores being torn off both upon the *Beaver* ſea, and in the iſlands which lie between *Aſia* and *America*. The combuſtible matter, he tells us, is kindled by the ruſhing of the ſalt water into thoſe ſubterraneous caverns, through their apertures towards the ſea; which hypotheſis is ſtrengthened by his obſervation that the earthquakes are moſt frequent about the equinoxes, when the waves of the ſea are driven by the great ſtorms with uncommon violence upon the ſhores; and eſpecially about the ſpring equinox, at which time the water always riſes higher than at any other: and the inhabitants of *Kamtſchatka* and the *Kuriles* know this ſo well, that they always fear the beginning of *March* and the end of *September*. 133 823

It is very extraordinary, that no iron has been diſcovered here, although ſome ore is obſerved mixed with clay and earth, to which 135

172 (62) Not finished blade, evidently intended to be subsequently elaborated into an implement of a specialized type. It might also serve as a scraper. Of greatly silicified slate. Length, 98 mm.; greatest width, 50 mm.; greatest thickness, 28 mm. (3029). Text-figure 57.

(63) A scraper of dark gray flint; one side is flat with some chippings from one edge; the other side is regularly convex with broad chippings. The working edge is rounded. Length, 41 mm.; greatest width, 26 mm.; thickness 9 mm. (3075). Text-figure 58.

(64) A stone lamp of sandstone with an ear for tying it to the sledge or canoe when traveling or hunting. 4/9 natural size (3146). Text-figure 64.

(65) A stone lamp for the dwelling, of porphyrite, 1/3 natural size (3141). Text-figure 65.

133 As stated above, we left the Kuril Lake on August 16—a quiet calm day. We crossed the lake, on the right being the rocky almost triangular Alaid Island, 823 where millions of birds were crying and rioting. The Japanese writer R. Torii[1] refers to a Kurilian tradition, according to which in ancient times a high mountain rose where we have now the Kuril Lake. It was a handsome lady, and the neighboring summits, jealous of her, made her life unbearable by mockery and sneering, so she decided to leave Kamchatka and settled in the open sea. This became a small rocky island, Alaid (in Aino, Chachakotan), located to the northwest of the Paramushiri Island, and Kuril Lake formed in the cavity. Baron Dittmar refers to another variant of the Kamchadal tradition concerning the origin of the Kuril Lake. There was formerly a volcanic summit Alaid, which disliked its location and wandered over to the sea. In the cavity left by the mountain, the Kuril Lake originated. The mountain, however, left a piece of rock in the middle of the lake which the Kamchadal call Heart-Rock or Navel-Rock. Kuril Lake, according to Dittmar, is the second greatest lake of Kamchatka, Kronotzkoye Lake being larger.[2] Geologists explain the origin of the Kuril Lake by the sinking of an old crater. The lake now lies 200 meters above sea-level and its depth in some places reaches 300 meters.[3]

000 The trip back to the seashore took us less than a day. Our boats were speeding and leaping over the rocks of the stony bed of the Osernaya River so that we had to use poles as brakes in order not to be overturned, particularly on the dangerous curves. Hunters, who come in spring on dog sledges to the Kuril Lake to kill bears, make quite primitive boats of twig-frames covered with bear skins in order to transport skins to the mouth of the Osernaya River. These skin-boats easily glide over the rocky rapids.

As I feared, the Government steamer had left for Petropavlovsk a day before we reached the shore. It did not stop at Osernaya, passing from the western strait to Petropavlovsk through the Kuril Strait. The fall storms had begun in the Okhotsk Sea and it was dangerous for the steamer to approach the coast, which has no harbor. We might have had to remain in Osernaya for the winter if it had not been for the administrators of the saltery and cannery, who were waiting for a special steamer before closing the plants. They had already sent off on a freight steamer the imported laborers and salted and canned goods. On the next day the

[1] Torii, *Études Archéologiques et Ethnologiques: Les Aino des Iles Kouriles*, Journal College of Science, Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921, p. 39.

[2] Carl von Dittmar, *Travels and Sojourn in Kamchatka in 1851–1855*, Part I, St. Petersburg, 1901, p. 464 (in Russian).

[3] See *The Kamchatka Expedition of F. P. Richoshinsky*, Zoological Division, Part I; F. J. Schmidt, Moscow, 1916. *The Investigations of the Zoological Division in Kamchatka in 1908–1909*, Chapter XII, written by Dr. A. N. Dershavin, one of Professor Schmidt's assistants.

5: Jochelson A-5 (1910-11) 1928 Kamchadal

000 longed-for smoke of a steamer appeared on the horizon, but it cruised in the sea many miles away, as it was not safe to come near the shallow shore in the turbulent weather. After three days of waiting the storm subsided, the steamer came nearer and a large boat was despatched to take us aboard. High waves almost capsized the boat and finally did at a distance of a few feet from the shore. We saw with horror that the four sailors were covered by the boat, but in a moment they appeared from beneath it with the rope in their hands and dragged the boat to the shore. When they had dried themselves in one of the houses we trusted ourselves and our collection from Kuril Lake to the frail boat and after two hours of struggle with the sea we mounted the rope-ladder of the steamer. Never before have I had such a stormy sea passage. After 5 days of sickness, sailing through the Kuril Strait, we reached Petropavlovsk, which we left for Vladivostok several days later on the last mail steamer of the season. The following remarks concerning the finds made on the Kuril Lake and the form of sites discovered in Kamchatka in general are necessary.

177 From the remnants of objects of Japanese culture no inference can be made as
325 to the age of the sites. As we saw before (see p. 62) Japanese objects, such as
554 coins, pieces of porcelain cups and metallic artifacts, might have reached Kamchatka
172 at a very early date. Krasheninnikoff says (I, p. 48) that the old Kamchadal knew the art of hammering fragments of metal. They did not temper iron but, placing it cold on a stone, forged it with another stone instead of a hammer. If the eye of a needle broke, they flattened the broken end and drilled a new eye with another needle.

According to Steller (p. 320), the Kamchadal paid homage to pieces of iron obtained from the Kurilians. The iron was set up on a pole in front of the dwelling as proof of the wealth and special importance of its owner. Krasheninnikoff also states (II, p. 97) that every Kamchadal possessing a fragment of iron was deemed rich and lucky.

177 The Kamchadal, now Russianized, no longer live in subterranean houses,
342 replacing the same by Russian block houses, or by huts of the Yakut type, also introduced by the Russians. According to the descriptions of Krasheninnikoff and Steller, the ancient Kamchadal earth-hut had no entrance room such as the Koryak use in their underground dwellings during the summer. The Kamchadal earth-hut was only a winter dwelling. Its smoke hole in the ceiling served at the same time as a window and door, through which one entered by descending along a log with notches or holes. This was the only entrance opening, but there was, however, an underground passage in the shape of a narrow channel, for the draught, which started from the hearth and came out of the house at the side. Women, children and the so-called transformed men used to go in and out through this passage. From the illustrations of the excavated pits of ancient Kamchadal dwellings we see that the channel-passage was an indispensable part of their habitations, and
342 we see also from illustrations that it could be directed to different cardinal points.
• 823 We may only surmise the reasons for such a diversity. We know that many of

342 the Siberian tribes, for instance the Yakut and Buryat, have the entrance of their dwellings faced to the east, where the sun rises. The sun is regarded as a benevo-
● 828 lent deity and it is advisable to have the door facing the sun in order to get its benefits. The back of the dwelling is turned to the west, the abode of evil spirits. The entrance of tents of nomadic peoples (Chukchee, Koryak, Tungus, Yukaghir and others) faces the east for the same reason. On the other hand the door of dwellings of maritime peoples faces the sea in order to give free access to sea-mammals, as though they were visitors. For the same reason the entrance of summer tents of Siberian fishers faces the river. According to Professor Petri the dwellings of the neolithic people of the Baikal region, the remnants of which he discovered, had entrances facing the south, the side of the sun's highest standing. Thus we can comprehend why the channel passage of the old Kamchadal dwelling faced, in some cases, the sea, in others the lake or a river in accordance with food, which one or another water basin supplied.

342 The shape of the pits was mostly oblong rectangular. On the Kuril Lake the pits were more or less quadrangular. The northern pits on the Kavran and Kulki Rivers were almost circular in form, thus nearing the shape of underground dwellings of the Koryak. The channel-passage is fitted in some cases to the middle of the oblong side of the pit and in others to the middle of the transverse side.

The largest pit, 34 by 30 feet, was excavated on the Nalacheva Cape and the smallest, 16 by 15 feet, on the Nalacheva Lake. The length of the channel passage ranges between 7 and 16 feet. With few exceptions, the channel-passage is longer, the larger the pit.

161 As the present remains of the pits of the former pit-dwellings are undoubtedly
592 smaller than the former dwellings themselves, on account of earth and sand deposited by winds and accumulated mold from decayed grass, we may draw the
361 conclusion that the ancient Kamchadal population was rather numerous and Kamchatka was densely inhabited. The pits are very near each other, and the shores of the Nalacheva Lake, as well as other places in Kamchatka, are covered with them. According to Krasheninnikoff, each pit-dwelling sheltered several related families. Often several pit-dwellings were located in one place, forming a village surrounded by earthen walls and trenches.

342 The Kamchadal pit-dwellings were used only during the winter. In the summer the Kamchadal lived in huts on piles several meters high. They were ascended by means of notched logs which could be drawn up to the platform of the huts. At present these elevated huts serve as storehouses. In some places, however, they are still used as summer dwellings (see Plate 4, B).[1] 2

In the pit excavated on the Osernaya River near the Kuril Lake, no traces of wooden posts were discovered. This may be regarded as a witness of the great age of the pit—the posts having decayed to such a degree that no trace of them is left.

[1] The summer pile-dwelling is also in use among the Gilyak but its posts are not so high as those of the Kamchadal pile-dwelling. The pile-dwelling, as an adoption from Siberia, is also reported from some places in Alaska (see H. P. Steensby, *An Anthropo-geographical Study of the Eskimo Culture*, p. 188). The storehouse on posts is known everywhere in Siberia, as well as in North America.

2. [Plate 4, A (not B) is a photograph of an elevated hut -- Analyst]

177
515
757
823

The various conſtructions which M. Kaſloff ordered for the greater convenience of his eſtabliſhment, detained us two days longer. Animated by a love of virtue and humanity, he enjoyed the pleaſure of having procured theſe ſalutary and pleaſant baths for his poor Kamtſchadales. The uninformed ſtate of their minds, or perhaps their indolence, would, without his ſuccour, have deprived them of this benefit, notwithſtanding their extreme confidence in theſe hot ſprings for the cure of a variety of diſ-
312 eaſes*. This made M. Kaſloff deſirous of aſcertaining the properties of theſe waters; we agreed to analyſe them, by means of a proceſs which had been given him for this purpoſe. But before I ſpeak of the reſult of our experiments, it is neceſſary to tranſcribe the proceſs, in order the better to trace the mode we adopted.

* Formerly they dared not approach theſe ſprings, or any volcano, from the idea that they were the abode of evil ſpirits.

Water

[The Governor-General of Okhotsk and Kamchatka--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

823 We felt that we had got among friends once more, and managed by
133 the aid of all these luxuries to pass a very pleasant evening, in spite of the cold. At night the beacon flame of Kluchi, now brilliantly illuminating the clouds of smoke that hung around the crater, now sinking almost to extinction, shone out far above our heads. There was an angry look about the volcano, and we were told that its activity had of late been somewhat increased. The explanation was simple. The Kanuli, or Spirits of the Mountains, whose home is in the bowels of the volcanoes, had merely been more fortunate than usual. It is hardly necessary, in these days of omniscience, to explain that it is to these beings that all volcanic disturbances are due. They go to the sea at night to catch whales, which are their favourite food, and the roasting of several of these animals within the crater is, as may be imagined, an operation which requires the consumption of no inconsiderable amount of fuel.

000 The weather had become steadily colder from day to day, and as we turned out on the morning of the 11th September we regretted that the Spirits of the Mountains had not seen fit to do their cooking in closer proximity to our camp. Our moustaches were frozen to the blankets, and the water in the bucket inside our tent was a sheet of ice. Morning observations and photography are always interesting, but they are certainly best appreciated when the thermometer is well above freezing. The view from our camp was glorious, and the mountains, cloudless from base to summit, towered above us with the startling clearness of outline so charac-
361 teristic of northern regions. Kojerevsky—a village of ten huts and
133 sixty-three inhabitants—lies at the foot of Uskovska, a mountain of nearly 13,000 feet, whose summit from this aspect presents the appearance of a uniformly rounded dome of snow. It is in reality twenty-three miles off as the crow flies, but the giant scale on which Nature works in these regions belittles space to an extent that is inconceivable, until the hard facts of actual measurement are before one. A little farther to the south and east is Kluchi, whose sharp peak rises to a vertical height of 3¼ miles above the

/571 cont./

000 Ainu. Steller (1) and Krascheninnikof (2) expressly state that the

K 177 192 174 325

1. Beschr. von dem Lande Kamtschatka, p. 249, note a, and p. 320.

2. /Opis. zemli Kamchatki /Description of the Region of Kamchatka/" (Poln. sobr. uchen. putesh. po Rossii, Vol. II, p. 49).

first iron implements of the Kamchadal, which they knew and used even prior to the arrival of the Russians in their country, were large Japanese iron needles, and their Kamchadal name also points to this origin of them, for "sühse" (according to Steller) or "schisch" (according to Krascheninnikof), as I have pointed out above (3), only means "Japanese" after the designation for

3. See pp. 407-412 above.

the Japanese passed on to the Kamchadal by the Ainu of the Kurile Islands. The Kamchadal, as Steller further reports, knew how to do some forging on these needles, which they presumably learned from the same Ainu who had brought them the needles. For instance, if the eye of the needle broke off during use, they made it red-hot, gave it a form like its former and by hammering it with a stone, /572/ and bored another hole in it with the help of another needle. Likewise prior to the arrival of the Russians, they also received through the Kurile Ainu pieces of Japanese iron ore. They knew of no other use for these, however, than to fasten them, if, as Steller relates, they were about 2-3 inches long and had roughly the shape of a knife, to the tip of a pole and set this up in front of their houses as a symbol of great respect and wealth. It is certain that this esteem of the Kamchadal for such an insignificant and in itself quite useless thing for them was based on information from the Ainu that this was the material out of which the Ssisan (Japanese), who in

K 439 325 177 556 823 K 823 A 823 186 439

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A 439 823 186

/572 cont./

their eyes, of course, were surrounded with the aura of great wealth and esteem, made those knives, swords, and the like which they themselves (the Ainu) prized so highly and paid for so dearly in trade with them. How very much this was the case can be seen from Steller's information that the Kurile Ainu gladly gave 20 sea beavers for an old Japanese saber and thought that they had made a very good trade, but wore such sabers only on festive days or during festive processions and made "the strangest figures during the welcoming" with them.

A 439 435

G A K 439 17 325

For the moment it must remain undecided whether the above-mentioned iron needles, which came from Japan to the Kamchadal as their first iron implements, spread from the latter to their neighbors, the Koryak and the Chukchee, before iron was brought these peoples by the Russians. At any rate, three Paleo-Asiatic peoples, the Ainu, the Gilyak, and the Kamchadal, received iron from Japan, and this was a natural consequence of the geographical position of the latter in the vicinity of these peoples, for just to the north of Nippon, the principal island of Japan, is the island of Jesso, the principal region of the Ainu (1),

A [131] [114] [113]

1. The view advanced chiefly by Ph. Siebold that the Ainu formerly also inhabited the north of Nippon (see above, p. 255) has recently been attacked by Brauns ("Die Bewohner des Japanischen Inselreichs /The Inhabitants of the Japanese Island-Realm/" in the Jahresber. des Frankfurter Vereins für Geogr. u. Statist., Years 48 and 49, 1883-1884, 1884-1885, Scientific Part, pp. 5 ff).

which, in turn, on the one hand, leads to the half-Gilyak Sakhalin, and, on the other hand, via the chain of the Kuriles, to Kamchatka. One may therefore draw the further conclusion that at the time when these peoples lived farther in the interior

G A K 174 325

which grows upon the Great River; but neither he nor I ever 137
saw this in the flower: 5thly, matista sladka trava *, or the 824
sweet plant, is as useful in their oeconomy as the saranne; 263
for the *Kamtschadales* use this not only as a confection in tarts 273
and broths, but in all their superstitious ceremonies this is absolutely necessary. The *Russians* were no sooner settled there, than 177
they found that brandy was to be distilled from it; and at present this is the only brandy that is publickly sold. The root of this herb is without yellowish, within, white; and of a bitter, spicy taste. The stem is fleshy, of three or four 137
joints, and about a man's height. Its flower is a reddish green, with short white hairs, longest near the root. The leaves upon the stem nearest the root are five or six, and sometimes even ten: they grow upon thick, round, fleshy, green, rough stalks, marked with little red spots. Upon the main stem, at every joint, arises one such leaf, but without a stalk. The flowers are small and white, like fennel, or other herbs of that sort; and consist of five leaves, of which the innermost are largest, and the outward smallest. It has two ovaria upon every flower, upon short small necks; and round them are five white stamina with green points, which rise higher than the flower. The flowers, taken all together, resemble a plate; while the stalks which support the umbella are longest without, and in the middle shortest: stalks arise from every joint, upon which are flowers.

This plant abounds every where in *Kamtschatka*, and the inhabitants gather and prepare it in this manner: they cut off the 222
stalks of the leaves which grow nearest the root, and with a shell 252

* Sphondylium foliolis pinnatifidis. Linn. Cliff.

scrape

is only the richer ſort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. Linn. Succ. Spec. 1. French willows.

1 [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.

boil

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

824 roll it about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

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273 ing; ſometimes they uſe a liquor made of a large muſhroon, with which the *Ruſſians* kill flies. This they prepare with the juice of epilobium, or *French* willow.

The firſt ſymptom of a man's being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad, according to his peculiar conſtitution. Some jump, dance, and ſing; others weep, and are in terrible agonies, a ſmall hole appearing to them as a great pit, and a ſpoonful of water as a lake: but this is to be underſtood of thoſe who uſe it to exceſs; for taken in a ſmall quantity it raiſes their ſpirits, and makes them briſk, courageous, and chearful.

276 It is obſerved, whenever they have eaten of this plant, they
824 maintain that, whatever fooliſh things they did, they only obeyed
828 the commands of the muſhroon: however, the uſe of it is certainly ſo dangerous, that unleſs they were well looked after it would be the deſtruction of numbers of them. The *Kamtſchadales* do not much care to relate theſe drunken frolicks, and perhaps the continual uſe of it renders it leſs dangerous to them. One of our Coſſacks reſolved to eat of this muſhroon in order to ſurpriſe his comrades; and this he actually did, but it was with great difficulty they preſerved his life. Another of the inhabitants of *Kamtſchatka*, by the uſe of this muſhroon, imagined that he was upon the brink of hell ready to be thrown in, and that the muſhroon ordered him to fall upon his knees, and make a full confeſſion of all the ſins he could remember, which he did before a great number of his comrades, to their no ſmall diverſion. It is related, that a ſoldier of the garriſon having eaten a little of this muſhroon, walked a great way without any fatigue, but at laſt, having taken too great
276 a quantity, he died. My interpreter drank ſome of this juice without knowing of it, and became ſo mad, that it was with difficulty that we kept him from ripping open his

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ſingle deer ſkin, that covers and ſits cloſe to every part of the body, ſo that the children ſeem to be entirely ſewed up. An opening at the bottom, before and behind, affords an opportunity of cleaning them. This opening is covered with another piece of ſkin, which may be faſtened and lifted up at pleaſure; it ſupports a tuft of moſs *, placed like a clout between the legs of the child, and which is renewed as often as it becomes neceſſary. Beſides the common ſleeves, there are two others hanging to the garment to place the arms of the child in when it is cold; the extremities are ſewed up, and the ſleeves lined on the inſide with moſs. There is alſo a hood fitted to it, made of the ſame materials as the reſt of the dreſs; but in yourts the heads of the children are almoſt always bare, and the hood hangs therefore upon their ſhoulders. Beſide all this,

* They make uſe of the herb called *tomchitcha* for the ſame purpoſe.

they

22: Guillemard T-2 (1882) 1886 Kamchadal

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that the hand could not be borne in it. Of these, as in Japan, there are many throughout the country, and they are greatly used for bathing purposes. At Malka, between Narchiki and Gunal, there is a spring of sulphurous water of great heat, in close proximity to another which is said even during the summer to stand steadily at the freezing point. We were, however, unable to visit it, and turned northward, passing across a *tundra* nine miles in length, and uninteresting enough in such weather. We had the pleasure, however, of seeing Vodki deposited in five feet of water in consequence of having fallen asleep upon his horse, but it must be confessed that our amusement was somewhat damped by discovering that our own personal baggage had suffered a like immersion.

We camped once more in a birch-wood, and but for the proximity of these trees we should have had no little difficulty in making a fire, as the forest was dripping wet.

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The birch is to the inhabitant of northern regions very much what the bamboo is to the native of the south. It is his general-utility tree, and without it he would indeed be badly off. The stem is used in the construction of the sledges, and the inner bark is said to be cut green and used for food. From the knotty parts of the wood good spoons are made, while the multifarious uses to which the smooth and pliant bark is adapted in the construction of dishes, cups, and vessels of all kinds are so well known by every northern traveller as to need no description. The boxes are often much

BIRCH-BARK BOX.

27: Sauer--290-291 T-2 (1789-93) 1802 Kamchadal
116, 132, 133, 137, 824

"The productions of nature [CMC: in central Kamchatka] are, a small kind of wild black cherry (tsheromka), in great abundance; the wood of which, being particularly hard, is used by the Kamtshadals for their guiding sticks to the sledges: the thickest trees that I have seen are nine or ten inches in circumference. Firs, common pine and larch trees of extraordinary size, with birch, poplar, asp, and mountain-ash, clothe the mountains to their summit. The underwoods are, currant, dog-rose, hawthorn, alder, and bushes producing berries.

The climate is very different from that of the southern and northern parts of the peninsula, the valley being completely sheltered from the sea-breezes that chill the air in other parts, and prove a great check to vegetation, which commences here in the month of March. The scenery is beautiful beyond description, [291] the river meandering through the midst of the valley, from 50 to 250 yards wide, and from eight to 15 feet deep, and being replete with trout and every species of salmon in the season. This valley is 180 miles in length, frequently opening prospects of the Tolbatshinsk, a lofty double-headed mountain, constantly emitting an immense column of black smoke; while the second volcano, Klutshefskoi, towering to an incredible height, illuminates the clouds with its blaze, and affords a view awfully grand."

27: Sauer--291-292 T-2 (1789-93) 1802 Kamchadal
116, 177, 283, 563, 824 Russia
636.24

"Twelve versts below Virchnoi Kamtshatskoi Ostrog, is the village called Milkovoi, inhabited by farmers sent from Siberia at government expence, and possessing particular emoluments, for the purpose of growing corn and pulse to supply the country. They live uncontrolled, however, and find it easier to accumulate wealth, by acting as retailers for the merchants of Kamtshatka, and going themselves on the chase for sables, &c.; than in pursuing the more toilsome labour of cultivating the earth, which they neglect. Yet they keep gardens that produce very fine cabbages, potatoes, turnips, carrots, cucumbers, &c.; they also grow buck-wheat and rye for their own use, which yield abundantly; and I am inclined to think that, had they a proper inspector to superintend their business, they might with ease grow corn enough of every kind to supply not only the peninsula, but all the neighbouring country, Ochotsk, &c. Hemp grows remarkably well, which, however, I think there is no need of cultivating; for the nettle seems equally to answer every purpose. The Kamtshadals and Russians make sewing thread of it, and fabricate from it their fishing nets, which serve them, if used with caution, and properly dried, four or five years. The process of preparing it is nearly the same as that for hemp, but I think less troublesome; the nettle grows to the height of six and seven [292] feet; the fibres are much finer; and thread of equal thickness is stronger than that made of the imported hemp."

ſlands of *America*. When they eat, they ſit upon their hind 136
legs like a ſquirrel, and hold their food, which is roots, berries, 224
and cedar nuts, with their fore feet. They are pretty to look
at, and whiſtle ſurpriſingly loud. No body thinks 1his
while to hunt ermines *, weaſels †, or common marmottas ‡,
unleſs by chance they meet with them; ſo that one cannot
reckon ermines amongſt the furrs of *Kamtſchatka*. But there is 825
a creature of the weaſel kind, called the glutton ‖, whoſe furr 237
is ſo greatly eſteemed above all others, that when they would 301
deſcribe a man moſt richly attired, they ſay that he is cloathed 291
with the furr of the glutton. The women of *Kamtſchatka*
dreſs their hair with the white paws of this animal, and reckon
them a very great ornament. However, the *Kamtſchadales* kill
ſo few of them, that they not only have not enough for exportation, but even import ſome from *Jakutſki* at a very great
price. They put the greater value upon the furr of the glutton 825
the whiter and yellower it is, although every where elſe this ſort is 435
deſpiſed: nay, they eſteem it ſo much, that they ſay the heavenly
beings wear no other garments than of this furr; nor can
they make their wives or miſtreſſes a greater preſent than
of one of theſe ſkins, which was formerly ſold for thirty, and
even ſixty rubles; and for the two paws which the women wear
in their hair, they ſometimes give one, and ſometimes two ſea
beavers. The greateſt number of theſe gluttons is found near 136
Karaga, *Andirſka*, and *Kolima*. They have a ſurpriſing dexte-

* Ermineum majus. Gmel.
† Ermineum minor. Ejuſdem.
‡ Marmotta vulgaris. Ejuſdem.
‖ Muſtella rufo-fuſca, medio dorſi nigro. Linn.

1 [Original torn. Probably "it worth"

exquiſite pain that the bear can make no further reſiſtance, and allows the hunter to lead him wherever he pleaſes, or ſtab him with his knife, without any danger. 224

The *Kamtſchadales*, however, look upon it as an affair of ſuch conſequence to kill a bear, that whoever has this honour, is obliged to feaſt all his neighbours; at which entertainment the bear's fleſh is the principal diſh; and, as a trophy, the bones of the head and thighs are hung round about their huts. 224 574

Of the bears' ſkins they make their beds and coverings, caps, gloves, and collars for their dogs. The fleſh and fat are their moſt delicate food; and the fat, when melted, is thin, and might be very well uſed with ſallad. With the guts they cover their faces in ſummer to keep off the ſun: ſometimes they uſe their ſkins as ſhoe-ſoles, to prevent them from ſliding upon the ice; and with their ſhoulder-blade bones, made ſharp, they cut graſs. 237 262 293

From the month of *June* to the end of harveſt the bears are very fat; but in the ſpring they are lean and dry. In the ſtomachs of thoſe killed in the ſpring nothing is found but a frothy ſlime: whence the inhabitants maintain the general opinion, that the bear has no food throughout the whole winter, but ſupports himſelf by ſucking his paws. 136 125 237

Although, as has been related above, wolves abound in *Kamtſchatka*, and their furrs are in great eſteem for cloaths, yet few are caught there. They differ in nothing from the wolves that are found in other places. By their cunning and fierceneſs they do more hurt to the inhabitants than their furrs bring profit; for they kill not only the wild deer, but even herds of the tame, notwithſtanding the latter have always a watch. Their favourite morſels ſeem to be the tongues of the deer, or even of the whales that are thrown upon the ſhore: they ſometimes ſteal the hares and foxes out of the traps and ſnares. White 136

wolves

numbers. The tegulchitch, or first kind, have nests very 136
roomy, neat, and spread with grass, divided into different apartments; in some of which they lay up the saranne quite clean, in others rough; in others, again, several sorts of roots, which they gather in summer with great labour, and lay up against winter. In dry sunny days they drag these out of their nests, and dry them. During the summer they live upon berries, and what else they can find proper for their food; never touching their winter provision so long as they can find any food in the fields. Among the several things found in their nests, I observed the saranne, the anacampserus, bistort, goats-beard, burnet, and cedar nuts.

These rats change their habitations like the wandering tartars, 136
and sometimes for a certain number of years they all leave 825
Kamtschatka, and go to some other place. This retirement is 787
very alarming to the *Kamtschadales*, who think it forebodes a rainy season and a bad year for the chace: but when these creatures return, they confidently expect a fine one and good hunting; so that, as soon as they begin to re-appear, expresses are sent to all parts to carry the good news. They always take their departure in the spring, first gathering together in vast numbers. They direct their course due west, crossing rivers, lakes, and even arms of the sea; and when, after long swimming, they reach the shore, they lie upon the banks, as if they were dead, 'till at length they recover their strength, and then set out again upon their march. Their greatest danger in the water is lest some ravenous fish should swallow them up: but upon the land they have nothing to fear; and the *Kamtschadales*, who are so greatly interested in their preservation, when they find them weak upon the banks of the rivers or lakes, they give them any assistance in their power. From the river *Pengin* 136
they go southward, and about the middle of *July* they generally reach *Ochotska* and *Judoma*. Sometimes their troop is so nu-

 merous

136 merous that travellers muſt wait two hours before they paſs. They return commonly to *Kamtſchatka* about the month of *October*. It is ſurpriſing that ſuch ſmall animals, in one ſummer, can paſs over ſuch an immenſe tract of land; and one cannot but admire the order and regularity which they obſerve in their march, as well as the foreknowledge they have of the change of weather.

225 Some of the inhabitants aſſured me, that when they go out of their neſts they cover their proviſions with poiſonous herbs, to deſtroy other rats that may come to rob their ſtore; and that, if all their winter proviſion is taken away, and nothing left that they can eat, in the ſtead of their own ſtores, they ſtrangle themſelves for vexation, ſqueezing their necks between the forked branches of ſhrubs: for which reaſon the *Kamtſchadales* never take away all their ſtore, and even pay for what they take by putting in either dried caviar, or ſomething that will ſerve the poor creatures for ſuſtenance. Although all theſe circumſtances are related by the moſt ſerious of the *Kamtſchadales*, yet we muſt not implicitly rely on their authority, before the facts are better enquired into.

231 The dogs of *Kamtſchatka* are extreamly like the common village dogs, and are white, black, ſpotted white and black, or grey like the wolves; brown or other colours being very rare. They are eſteemed ſwifter and longer-lived than any other dogs; and this may be attributed to their light ſimple food, which is fiſh. In the ſpring, every one lets his dogs run at liberty, without taking any care about them; for they can be uſed for travelling only while the ſnow is on the ground. They then feed upon what they can get in the fields, where they dig for the mice; and in the rivers they, as well as the bears, catch fiſh. In the month of *October* the *Kamtſchadales* call them home, and tie them up near their huts, 'till they loſe a good deal of their fat, that they may be lighter for the road, and then one hears

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

231 in the greateſt ſtorm, when a man cannot ſee the path, nor even
492 keep his eyes open, they very ſeldom miſs their way; and if
825 they ſhould, they go from one ſide to the other, 'till by the
237 ſmell they find it again: and when it is abſolutely impoſſible to
787 travel at all, which often happens, then the dogs lying round their maſter defend him from all danger. They alſo give certain ſigns of an approaching ſtorm; for, when they ſtop, if they ſcrape the ſnow with their feet, it is adviſeable, without loſs of time, to look out for ſome village, or other place of ſafety. And, it is ſaid, the dogs here ſerve inſtead of ſheep, becauſe their ſkins are uſed for cloaths; particularly thoſe of the white dogs, with which all their different ſorts of garments are trimed.

The number of dogs they put to a ſledge, how they break them, and what weight they carry, ſhall be mentioned hereafter, when we come to deſcribe the manner of travelling with dogs.

231 Thoſe which are bred up to hunt the deer and wild rams, ſables, foxes, and the like, are ſometimes fed with jackdaws, which, it is obſerved, make their ſcent the ſtronger for finding out birds and wild beaſts.

Beſides dogs, they have here cows and horſes, but no other domeſtic animals. There is no fit place to feed ſheep on, either upon the Eaſtern Ocean, or the ſea of *Pengine*; for the wet weather and the ſtrong juicy graſs would ſoon rot and deſtroy them. Near the upper *Oſtrog*, and upon the river *Koſireff*, ſheep thrive; the weather being fairer, and graſs leſs watry; but then there muſt be a good proviſion of hay made for them againſt the winter, the ſnow being too deep for them to find their food in the fields; for which reaſon, from the mouth of the river *Ilga* to *Jakutſki*, very few ſheep are kept.

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237 262 251 those made of timber, in that they are much lighter and go swifter. Of the seals' fat both *Russians* and *Kamtschadales* make candles; and besides the natives esteem it such a delicacy that they can have no feast without it. The flesh they boil or dry in the sun; but if there are great quantities, they smoke or bake it in the following manner: They dig a large pit in proportion to the quantity of flesh or fat, and pave the bottom with stones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the ashes, then lay at the bottom a layer of green poplar wood, upon this another of seals' flesh or fat, each separately; and thus alternately wood and flesh until the pit be quite full. They then cover it with grass and earth, to keep in the heat; and after some hours they uncover it, take out the fat and flesh, and lay it up for the winter. Both flesh and fat thus prepared is much more delicate than what is boiled; besides, it keeps without spoiling for a whole year.

825 796 782 When they have picked all the flesh from the heads of the seals they shew them all the respect that they would to a particular friend that visits them. I saw this ceremony in the year 1740 at the little fort of *Krodakighe*, which stands upon a river of the same name that falls into the Eastern Ocean. It was performed in the following manner: They brought in the skull or head of a seal, bound round with the sweet grass, and placed it upon the floor. Then a *Kamtschadale* entered with a bag filled with the sweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtschadales* rolled in a great stone, and set it opposite to the entry of the hut, about which they laid several stones; and two others tore the sweet herb, and made it into small bunches. The great stone was to signify the sea, the smaller the waves, and the bunches of the sweet herb the seals. This being done, they took three dishes of caviar mixed with kipre, hurtleberries, and seals' fat

fat. This they ſqueezed into balls, in the middle of which they preſſed the ſweet herbs which were made to repreſent the ſeals: out of the birch bark they made little boats, which they filled with theſe balls made as above, and covered them with herbs. 825 796 782

After ſome time they took theſe boats and balls and toſſed them to and fro over the ſtones as if over waves, that the other ſeals might ſee with what reſpect the *Kamtſchadales* treated their friends, and conſequently might the more willingly fall into their hands. After this they placed the ſeals made of the ſweet herbs near to the great ſtone, or ſea, and all went out of the hut; but one old man, after he had ſet upon the threſhold a ſmall diſh with their broth which he had carried behind them, entered into it again, all the aſſiſtants crying aloud four times the word *Lignouleghe*. They could not tell what this term meant; nor could they give any other reaſon for their ſo crying out, but that their fathers did ſo. After this they again rolled the birch boats upon the ſtones; and going again out of the hut cried, as before, *Kouneouſhite aloulaighe*; that is, May the wind blow towards the ſhore. For while this wind blows a great deal of ice is driven towards the land, which is favourable for their killing the ſea animals. Returning into their huts, they rolled their birch boats a third time over the ſtones. They then put the ſkulls of the ſeals into a bag, and every fiſher preſent put in alſo a little of the ſweet graſs, with his name and ſome particular ſentence; that the ſeals might know how they had entertained them, and what valuable preſents they had made them.

Having, as they thought, by their entertainment and preſents, ſhewn all reſpects to their gueſts, they brought them out to the ſtair-head, where an old man put ſtill ſome more of their gruel into the bag, deſiring them to carry that to their friends that had been drowned at ſea. Then two *Kamtſchadales* who had been principally employed in this entertainment, took the bowls that were

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

825 were filled with gruel and the ſeals made of graſs, and gave one
796 to each fiſher. They then went all out of the hut, and cried
782 *Uenic*; a word they uſe in calling to one another when they go to kill the ſeals or other ſea animals. Then taking out the ſeals made of graſs they threw them into the fire, praying them to make them frequent viſits; after which, returning into the hut, they put out the fire, and eat the gruel that was in the bowls.

136 The ſea horſe is but ſeldom ſeen about *Kamtſchatka*, and then only in the moſt northernly places. The moſt are caught near the cape of *Tchukotſkoi*, being both larger and more numerous there than any where elſe. Their teeth are what we commonly call fiſh-bone, the price of which depends upon their largeneſs or weight: the deareſt are thoſe that are about twenty pounds; but theſe are ſeldom met with, or even ſuch as weigh ten or twelve pounds, the common weight being five or ſix pounds.

The ſea lion * and cat, in their uſual ſtructure, differ very little from the ſea horſe and ſea calf, and are therefore to be reckoned of the ſame kind.

Some call the ſea lions ſea horſes, becauſe they have manes. In their ſhape they are like the ſea calf; and their necks are bare, excepting a ſmall mane of hard curled hairs: the reſt of their body is covered with a cheſnut-coloured hair. They have a middle-ſized head, ſhort ears, a ſnout ſhort and drawn up like a pug dog's, great teeth, and webbed feet. They are found moſt frequently about rocky ſhores or rocks in the ſea, upon which they climb very high, in great numbers. They roar in a ſtrange, frightful manner, much louder than the ſea calf; and they are thus far of uſe to people at ſea, that in foggy weather, by their roaring, they warn them of rocks or iſlands being near, as few rocks or iſlands in this part of the world are without theſe animals.

* Leo marinus. STELLER.

Although

are catched about the cape of *Kronotzkoy*, as between this and the cape *Shupinskoy* the sea is generally calm, and affords them properer places to retire to. Almost all the females that are caught in the spring are pregnant; and such as are near their time of bringing forth their young are immediately opened, and the young taken out, and skinned. None of them are to be seen from the beginning of *June* to the end of *August*, when they return from the south with their young. The natives were formerly at a loss to conceive where such great herds of pregnant fat animals retired in the spring, and why they returned so weak and lean in the summer: they conjectured, that as they thus regularly swam from the south in the spring, and returned in the summer, their being so lean was owing to their fatigue.

The females bring forth their young there, and being at rest recover their former strength; they nurse their young ones three months, 'till they are able to return with them to their former habitations in the summer. The females suckle their young with two teats, which are placed between their hinder paws; they have seldom more than one; and when they bring forth they gnaw off the navel string like a dog, and greedily eat the after-birth. The young see when they are whelped, their eyes being as large as the eyes of an ox; and have thirty-two teeth, not reckoning their tusks, two of which are on each side, and begin to appear the fourth day after their birth. Their colour at the first is a dark blue; but in four or five days grey hairs begin to appear between their hinder legs, and at the end of one month their belly is black and grey. The male is born larger and blacker, and even continues blacker than the female, which turns almost of a blue colour as she grows up, having only grey spots between her fore legs. The male and female differ so much in the form and strength of their bodies, that one who does not carefully examine them would take them for different species of animals

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

and cleaning the guts, they fill them with the oil which runs in cutting the fish, or which they melt from the blubber, having no other vessels to keep it in. 171 225

The *Tchukotskoi* kill whales with a harpoon in the same manner as the *Europeans* do, and they catch so many that they never eat those whales that are thrown dead on shore, as some of the neighbouring people do, but only extract their fat for burning. Although the *Tchukotskoi* have large herds of deer, which might be sufficient for their sustenance, yet they are the greatest whale fishers of any people in this part of the globe, and look upon the fat of the whales as the greatest delicacy; besides, having great scarcity of wood, they use it for burning. They make themselves shirts of the intestines of the whales, like the *Americans*; and use them for vessels, like the *Olutores*.

The kasatki, (falsely called the sword-fish) which are numerous in these seas, are very useful to the inhabitants, for these fish frequently either kill or drive the whales on shore. *Steller* had an opportunity of seeing an engagement between the kasatki and whale, both at sea and upon *Bering*'s island. When the kasatki attacks the whale he makes him roar so that he may be heard some miles. If the whale makes off, the kasatki follows him at some distance 'till great numbers of them gather together, and make a general attack. It is never observed that such whales as are thrown on shore have any part eaten out of their bodies; so that this war between the whales and the kasatki must proceed only from a natural enmity. The fishers are so much afraid of these animals that they not only never throw any darts at them, but if possible avoid going near them; nay, they even make offerings to them, begging that they will not hurt them: for if irritated they sometimes overturn their boats. 136 825

225 Mr. *Steller* writes that he was certainly informed, that in the bodies of whales thrown upon the coaſt of *Kamtſchatka*, there have been found harpoons marked with *Latin* letters; but by what means he could be certain of this, I know not; for the natives have no idea of letters; and before our arrival, none of our Coſſacks ever ſaw a *Latin* letter.

237 262 Many are the advantages which the *Kamtſchadales* derive from this plenty of whales: of the ſkin they make ſhoe ſoles and ſtraps; they eat the fleſh, as likewiſe the fat which they alſo burn; they ſew their boats with the beard, of which alſo they make nets for foxes and fiſh; out of the lower jaw they form a ſort of ſledge, and make knife-handles, rings, and ſeveral ſmall things of it beſides; the inteſtines ſerve for barrels, and other veſſels; out of the nerves and blood-veſſels they make ropes; and of the vertebræ, ſeats. The moſt delicate pieces of the whale are the tongue and fins. I thought that the whale's fat with grout was not unpleaſant, but I can't ſay, that I was then a proper judge, for hunger makes every thing agreeable.

226 736 825 They never go a fiſhing for the kaſatki, but if this fiſh is thrown on ſhore they uſe its fat like that of the whale. Mr. *Steller* ſays, that, in the year 1742, eight of them were thrown on ſhore at once, near the *Lopatka*; but the diſtance and the bad weather prevented his going to examine them. He was told, that the largeſt never exceed four fathoms in length; that they have ſmall eyes, a wide mouth, and great ſharp teeth, with which they wound the whale; but that they tear up the belly of the whale with a ſharp fin which is upon their backs, is a falſe report; for though this fin is about five feet long, very ſharp, and in the ſea ſtands quite upright, yet it is altogether ſoft, and conſiſts only of fat: nay the animal itſelf is almoſt all fat having hardly any muſcular fleſh.

There

136 brings forth its young alive, like the whale; and when its mouth is ſhut has ſome reſemblance of a ſturgeon, but its teeth are very different, being large and terrible. The *Kamtſ-*
262 *chadales* eat the fleſh of this fiſh,[1] and though it appears to
825 be tough and ſtrong, they ſay it is exceedingly well taſted. The guts, and particularly the bladder, are in high eſteem; ſo that when they catch this fiſh, they never call it by its name, for fear, as they imagine, they ſhould provoke it to burſt its bladder, and render it uſeleſs to them. The teeth are ſold under the name of ſerpents' teeth.

136 Several fiſhes which are common to other ſeas are found here;
262 as pike, eels, lampreys, cod, and very fine ſoals in great plenty;
231 but the inhabitants make no account of theſe fiſh, and never uſe them unleſs in great neceſſity, or to feed their dogs. Mr. *Steller* obſerved four different ſpecies of flat fiſh.

There is a fiſh called * vahnae, which is a ſpecies of the cod; is round and thick, with three fins upon its back; and when taken out of the water is of a copper-colour, but preſently changes to yellow: its fleſh is white, but ſoft, and of a diſagreeable taſte; however the inhabitants eat more of it, than of other fiſh which are much better taſted; the reaſon indeed is, that they catch this fiſh in the beginning of the ſpring, when they can catch no other; a great deal of which they dry in the ſun uncleaned, deſigning it as proviſion for their dogs.

136 I ſaw the fiſh which they call † terpuk, but it being dry, I could not obſerve thoſe fine colours which Mr. *Steller* deſcribes. By his deſcription its back is blackiſh, its ſides are reddiſh, and chequered with fine ſilver-coloured ſpots; ſome of which are ſquare, and others circular: in its ſhape it reſembles the perch.

1. [Mokoe or Canis Carcharius Autorum]

* Onos vel Aſinus Antiquorum.

† Doecogrammos Stelleri.

They

The different ſpecies of thoſe fiſhes which are here called red fiſh ſhall be mentioned in giving an account of the time when they come out of the ſea into the rivers; it being remarked that they always obſerve the ſame order, the ſame ſpecies which comes out firſt one year continuing to do ſo the following. This the *Kamtſchadales* find to be ſo certain, that they call their months by the name of the fiſh which are then caught.

The largeſt and beſt of theſe fiſh, and which come firſt out of the ſea, are called chavitſi. It reſembles the common ſalmon, though it is a great deal broader; is about three feet and a half long, and weighs a pood and a half; its breadth is about the fourth part of its length; its noſe is ſharp, the upper jaw being longer than the lower; its tail is equal; the back is bluiſh, with ſome ſmall black ſpots; its ſides are of a ſilver colour, and its belly white; its gills are long and ſmall; and its fleſh is red both raw and boiled.

They ſwim up the rivers with ſuch force that the water ſeems to riſe like a wall before them; which the *Kamtſchadales* obſerving get into their boats, and throw out their nets. This fiſh does not come up in ſuch large ſhoals as the others, nor is ſuch plenty caught as to make *eukol* of it, except upon the river *Kamtſchatka*; and even there it is ſo rare that it is only uſed on feaſts or holydays, and after all it is ſo fat that it preſently turns bitter. The Coſſacks, for the moſt part, ſalt it, particularly the belly, back, and head. The ribs are dry and hard, but the belly is truly a delicate food, at leaſt no fiſh there comes up to it; and what they dry in the ſun, if not better than the *Jakutſki* ſturgeon, is at leaſt not worſe.

Of all the rivers that run into the Eaſtern Ocean this fiſh is only found in the river *Kamtſchatka* and the bay of *Awatſcha*; and of thoſe that fall into the *Penſchinſka* ſea, only in the *Bolſcheretſkoi* river: beſides, Mr. *Steller* ſays, that none is to be found further north than 54°, and it is certain that it is not

The third kind of this fish is called keta or kacko; which is somewhat larger than the narka. The flesh is white; the head flattish and longish; the snout is bent; the teeth, when it has been some time in the river, are like a dog's; its tongue is sharp; its tail a little forked; its back black and green; its sides and belly like other fish; and its skin is without spots. The *eukol* that is made of this fish they call their household bread, being much more plenty than any other; as the season of the fishery, which begins in *July* and ends about the middle of *October*, is drier and more proper for preparing it. This fish is caught in all the rivers both in the *Penschinska* and Eastern seas. 136 262

The gorbushe, or crook back, follows or sometimes accompanies the keta. This fish is more plentiful than any other whatever; it is about eighteen inches long, and flattish; its flesh is white; its head small; its snout sharp, and considerably crooked; its teeth small; its back bluish, with round black spots; its sides and belly like the other sorts; and the tail forked. Though this fish is not bad, yet the inhabitants have such plenty of what they esteem better, that they use this only for their dogs. 136 262 231

The last of these kinds that come on shore is called white fish. This fish both in bulk and appearance is very like the keta; they differ in this indeed, that the keta has no spots, and the white fish has long black spots upon its back. It excels in taste all the fishes that have white flesh; and it agrees with the narka in this, that it most frequently haunts those rivers that run out of the lakes, and is caught there in the same manner. The young ones, which accompany the old to take care of the roes and convoy the young fry down, are esteemed by the inhabitants to be a different species, and are called milktchuch. So soon as the old ones have spawned, they take all care to provide for their own safety, retiring immediately to deep places where there are warm springs; and they are chiefly found in the springs near the *Bolscheretskoi* river 136 825 226 136 226

 and

CLASS I. *Of the* SEA FOWLS.

The ſea fowls are found in greater plenty about the coaſt of the Eaſtern Ocean, than that of the *Penſchinſka* ſea; for the coaſt of the Eaſtern Ocean is more hilly and convenient for breeding. 136

The ipatka * is well known to all writers of natural hiſtory by the name of anas arctica, commonly called in *England* puffins. It is found upon the coaſt of *Kamtſchatka*, and the *Kurilſki* iſlands, and even upon the *Penſchinſka* bay, almoſt as far as *Ochotſka*. It is about the bigneſs of, or rather ſmaller than, a common duck; its head and neck are of a bluiſh black; the back is black; the belly and all below white; its bill red, and broad towards the root, but ſomewhat narrower towards the point; upon each ſide are three furrows; its legs are red, its feet webbed, and its nails ſmall, crooked, and black; its fleſh is hard; its eggs are like hen's eggs; it builds its neſt with graſs on the cliffs of the rocks. The *Kamtſchadales* and *Kuriles* wear the bills of theſe birds about their necks faſtened to ſtraps; and, according to their ſuperſtition, their ſhamans, or prieſts, muſt put them on with proper ceremony, to procure them good fortune. 277 825

Another ſpecies of theſe birds is called meuchagatka †, and in *Ochotſka*, igilma: this only differs from the former in being all black, and having two yellowiſh white tufts upon its head, which lie all along from its ears to its neck like locks of hair. To the beſt of my remembrance this bird has never yet been deſcribed. Mr. *Steller* and I ſent ſome of theſe ſpecies of birds to the Imperial Muſeum. Among thoſe ſent by Mr. *Steller* there was a third kind which is found upon the iſland *Bondena*, in *Angermannia*, and upon the *Caroline* iſlands; and is ſome- 136

* Alca roſtri ſulcis quatuor, oculorum regione temporibuſque albis. LINN. F. ſuec. v. 42.

† Alca monochros ſulcis tribus, cerro duplici utrinque dependente. Anas arctica cirrata. STELL.

252 such a manner that, as victuals are there, it is not bad; they
262 roast it in holes dug in the earth, without plucking off the feathers, or taking out the entrails, and when roasted, they skin and eat it.

825 The natives say that these birds[1] have no tongue; but this is not true, for they cry in the mornings and evenings: Mr. *Steller* compares their noise to the sound of a trumpet.

136 CLASS II. *Of those Birds which haunt for the most part about*
223 *the fresh Water.*

The first of this class is the swan, which is so common in *Kamtschatka*, both in summer and winter, that the poorest person can have no entertainment without a swan. When they are moulting they hunt them with dogs, and kill them with clubs: in the winter they catch them in those rivers that do not freeze.

136 Here are seven kinds of geese, which are distinguished thus: large grey geese, gumenniki, short necks, grey and speckled, white necks, small white geese, and foreign. They all come here in the month of *May*, and depart in the month of *October*, as Mr: *Steller* says; who likewise writes, that they come from *America*, and that he himself saw them pass *Bering*'s island in great flocks, flying east in the harvest and west in the spring. In *Kamtschatka* are principally found the large grey geese, the gumenniki, and the grey and speckled; the small white goose is hardly ever found here. Again, in the North Sea, about *Kolimi* and other rivers, are vast numbers of them; and the best down
223 is brought to *Jakutski* from these places. They catch them at the time they cast their feathers, in the following manner:— They build huts with two doors, near those places where they most commonly sit at night. The fowler putting a white shirt on, above his cloaths, steals as near the flock as he can; and shewing himself

1 [Urile, Corvus aquaticus maximus Cristatus periophtalmiis Cinnaberinis, postea Candidis. Stell.]

being ſomewhat yellowiſh at the end, with a ſmall white ſtripe; the head is black, and upon its temples are ſmall white ſpots: it weighs about a pound and a half. 136

In the harveſt the females are found in the rivers, but none of the drakes: they are very ſtupid and eaſily caught where the waters are clear and ſhallow, for they do not fly away at the ſight of a man, but only dive, and therefore may be eaſily killed with poles, as I myſelf have frequently done. Mr. *Steller* ſaw ſeveral of this kind of ducks in the *American* iſlands.

They catch the ducks with nets in the following manner: in a wood that happens to ſtand between two lakes, or between a lake and a river, they cut a ſtrait paſſage, through which the ducks fly during the ſummer; here in the harveſt, when the fiſhery is over, the natives faſten to long poles ſeveral nets, which in the evenings they raiſe as high as the ducks are uſed to mount: round the nets a ſtring is drawn, by which they can reef them together, as ſoon as they find the ducks entangled; but they ſometimes fly with ſuch force and in ſuch numbers, that they break through. They likewiſe catch them in ſmall rivers with nets ſtretched acroſs the ſtream: but this is a method not peculiar to *Kamtſchatka*. 223

To this claſs belongs likewiſe the gagari, or columbus, of which there are four ſpecies *, three of which are large, and the other ſmall: the firſt of the largeſt has a tail; the ſecond a clay coloured ſpot upon its neck, a little above the crop: the third is called by *Wormius*, the northern lumme; and *Marſilius* calls the fourth the little lumme. The natives pretend to foretel the change of weather by their crying and flying; for they think that the wind muſt always blow from that point towards which they fly: however they are frequently deceived in their judgment. 136 825 787

* 1. Colymbus maximus. Gesn. Stell. 2. Colymbus arcticus lumme dictus. Worm. 3. Colymbus macula ſub mente caſtanea. Stell. 4. Colymbus ſive pedicipes cinereus. *Ejuſdem.*

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 Here are alſo found great numbers of ſmall birds, ſuch as
223 plovers and ſnipes of different ſorts, which they catch with ſnares and gins.

CLASS III. *Of the* LAND FOWLS.

136 The chief of theſe birds is the eagle, of which there are four ſpecies in *Kamtſchatka*: the firſt is the black eagle, with a white head, tail, and feet. Theſe are rare upon the main land of *Kamtſchatka*; but, according to Mr. *Steller*, they are found in plenty on the iſlands between it and *America*. They make their neſts (which are near ſix feet in diameter, and about a foot thick) of ſhrubs upon high cliffs, and in the beginning of *July*, lay two eggs. The young ones are as white as ſnow: theſe he ſaw upon *Bering*'s iſland, but not without danger from the old ones, which, even when he did not the leaſt hurt to their young, attacked him with ſuch violence that he could ſcarce defend himſelf from them with his ſtick. The ſecond is the white eagle, which the *Tunguſi* call elo: this I ſaw near *Nertchinſki*; however it is not white but grey. Mr. *Steller* ſays, that this is bred upon the river *Harioufkovoi* which runs into the *Penſchinſka* ſea. The third is the black and white ſpotted eagle. The fourth, the dark clay-coloured eagle, the extremities of whoſe wings and tail are ſpotted: theſe two laſt mentioned abound moſt here.
262 The natives eat the eagles, and eſteem them agreeable food.

Here are likewiſe ſeveral other birds of prey, ſuch as vul-
136 tures, hawks of various kinds, owls, and above all, ravens, crows,
805 and magpies, which are the ſame with thoſe in *Europe*. Be-
825 ſides, here are great numbers of cuckoos, water ſparrows, growſe, partridges, thruſhes, larks, ſwallows, and ſeveral other ſmall birds, whoſe appearance in the ſpring the natives expect with great impatience, and thence begin their new year.

In the concluſion of this chapter we have added a liſt of ſome plants, beaſts, fiſhes, and birds, with their names in the *Engliſh*, *Ruſſian*, *Kamtſchatka*, *Koratſki*, and *Kurilſki* languages.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

136
251

AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatkoi* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

Nothing plagues the natives in their huts ſo much as the lice and fleas; the women ſuffer moſt from the former, by wearing very long, and ſometimes falſe hair. Mr. *Steller* was told, that near the ſea is found an inſect that reſembles a louſe, which working itſelf through the ſkin into the fleſh is never to be cured, unleſs by cutting the creature intirely out; and that the fiſhers are very much afraid of them. 136 515 302

It is remarkable that in *Kamtſchatka* there are neither frogs, toads, nor ſerpents. Lizards, indeed, are numerous enough, which the natives look upon as ſpies ſent from the infernal powers for information, and to foretel their death: therefore they are very careful whenever they find them to cut them into ſmall pieces, that they may never carry back news to the power which ſent them; and if it happens that the animal eſcapes alive, it throws them into the greateſt grief and deſpair, as they expect every hour to die, which indeed ſometimes happens from their own fear and deſpondency, and then ſerves to confirm the ſuperſtition to others. 136 825 787

CHAP. XII.

Of the TIDES *in the* Penſchinſka *Sea and Eaſtern Ocean.* 133

IT might perhaps appear ſufficient to ſay, that the tides are agreeable in theſe ſeas to what are obſerved in others; but as I made ſome obſervations which appeared to me new, I think it proper to communicate them.

It is a known rule in general, that the ebb and flood happen twice in the natural day, and that the tides are higheſt about the new and full moon: however, I do not recollect that it has been obſerved that the ebbs and floods are not equal here, or that they do

778 Besides these pillars several other places are reckoned sacred, such
776 as burning and smoaking mountains, hot springs, and some particular woods, which they imagine are inhabited by devils, whom they fear and reverence more than their gods.

771 All their opinions concerning both gods and devils are certainly
825 very simple and ridiculous; however, it shews that they endeavour to give an account for the existence of every thing as far as they are able; and some of them try to penetrate into the thoughts of the very birds and fishes; but when once any opinion is established, they never trouble themselves with enquiring whether the thing be possible or not. Hence their religion entirely depends upon ancient tradition, which they
777 believe without examination. They have no notion of a supreme Being that influences their happiness or misery, but hold that every man's good or bad fortune depends upon
775 himself. The world they believe is eternal, the soul immortal, and that it shall be again joined to the body, and live eternally subject to the same fatigues and troubles as in this present life, with this difference only, that they shall have greater plenty of all the necessaries of life: even the very smallest animals they imagine will rise again, and dwell under the earth. They think
772 the earth is flat, and that under it there is a firmament like our's; and under that firmament another earth like our's, in which when we have summer they have winter, and when we
775 have winter they have summer. With regard to future rewards and punishments, they believe that in the other world the rich will be poor and the poor will be rich.

577 Their notions of vice and virtue are as extraordinary as those they entertain of God. They believe every thing lawful that procures them the satisfaction of their wishes and passions, and think that only to be a sin from which they apprehend danger or ruin; so that they neither reckon murder, self-murder, adultery, oppression, nor the like, any wickedness: on the contrary, they

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

they look upon it to be a mortal ſin to ſave any one that is drowning, becauſe, according to their notions, whoever ſaves him will be ſoon drowned himſelf. They reckon it likewiſe a ſin to bathe in, or to drink, hot water, or to go up to the burning mountains. They have beſides theſe innumerable abſurd cuſtoms, ſuch as ſcraping the ſnow from their feet with a knife, or whetting their hatchets upon the road. This may, however, be ſaid, that they are not the only people who have ridiculous ſuperſtitions.

Beſides the above-mentioned gods they pay a religious regard to ſeveral animals, from which they apprehend danger. They offer fire at the holes of the ſables and foxes; when fiſhing, they intreat the whales or ſea horſes not to overturn their boats; and in hunting, beſeech the bears and wolves not to hurt them. This was the ſtate of theſe people the firſt years of my being amongſt them; but now, by the care of the Empreſs *Elizabeth*, miſſionaries are appointed to inſtruct them in the Chriſtian faith. In 1741 a Clergyman was ſent by the ſynod with aſſiſtants and every thing neceſſary for building a church, and inſtructing this wild people; which has been attended with ſuch ſucceſs, that not only many of them are baptized, but ſchools are alſo erected in ſeveral places, to which the *Kamtſchadales* very readily ſend their children: ſo that in a few years we may hope to ſee the Chriſtian faith planted in all theſe northern countries.

CHAP.

7:Lesseps T-3 (1787-88)1790 Kamchadal

533 The words mean,

Daria *, Daria ſings and dances ſtill.

This air is repeated without ceaſing.

535 In their dances they are fond of imitat-
825 ing the different animals they purſue, ſuch as the partridge and others, but principally the bear. They repreſent its ſluggiſh and ſtupid gait, its different feelings and ſituations; as the young ones about their dam; the amourous ſports of the male with the female; and laſtly, its agitation when purſued. They muſt have a perfect knowledge of this animal, and have made it their particular ſtudy, for they repreſent all its motions as exactly, I believe, as it is poſſible. I aſked the Ruſſians, who were greater connoiſſeurs than myſelf, having been oftener preſent at the taking of theſe animals,

* Daria is a female Ruſſian name.

whether

7:Lesseps T-3 (1787-88)1790 Kamchadal

535 whether their pantomime ballets were well
825 executed; and they assured me that the dancers were the best in the country, and that the cries, gait, and various attitudes of the bear, were as accurate as life. Meanwhile, without offence to the amateurs, these dances are, in my opinion, not less fatiguing to the spectators than to the performers. It is a real pain to see them distort their hips, dislocate every limb, and wear out their lungs; to express the excess of pleasure which they take in these strange balls, which, I repeat it, resemble the absurd diversions of savages: the Kamtschadales may indeed, in many respects, be considered as of that rank.

224 Having given an account of the address with which these people counterfeit the postures and motions of the bear, who may be called their dancing master, it may not be unpleasing to relate in what manner they hunt

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 more certainty. It is ſeldom that, with
411 the ſmalleſt ball, he does not ſtrike the bear either in the head, or near the ſhoulder, which is the tendereſt part. But he is obliged to charge again inſtantly, becauſe the bear, if the firſt ſhot has not diſabled him, runs* at the hunter, who has not always time for a ſecond ſhot. He has then recourſe to his lance, with which he quickly arms himſelf to contend with the beaſt, who
224 attacks him in his turn. His life is in dan-
825 ger† if he does not give the bear a mortal thruſt; and in ſuch combats, it may be ſup-

* It is common enough alſo for it to take to flight, notwithſtanding its wound, and conceal itſelf in thickets or ruſhes, where it is traced by means of its blood, and found either dead or expiring.

† I was aſſured that when a bear triumphs over his aggreſſor, he tears the ſkin from the ſkull, draws it over his face, and then leaves him; a mode of revenge which implies, according to the Kamtſchadales, that this animal cannot bear the human aſpect; and this ſtrange prejudice ſupports them in the opinion of their ſuperiority, and ſeems to inſpire them with additional courage.

poſed

7:Lesseps T-3 (1787-88)1790 Kamchadal

844 862 these occasions they make use of their hair, I am told, to tie the umbilical cord, carry home their children themselves, and immediately give them suck. They have no limited time for suckling their children, and I have seen instances of its continuing for four or five years. We may judge from this circumstance of the strong constitution of these women. It is observed, however, that Kamtschadales of either sex, do not live longer than Russians.

278 825 I forgot to mention a remedy to which the inhabitants of this peninsula have voluntary recourse in almost every disease: it is to a root called *bears root*, which they steep in brandy. The name sufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himself upon it when wounded, they imagined it to possess some healing quality, and this

7:Lesseps T-3 (1787-88)1790 Kamchadal

278 this induced them to make uſe of it. This
825 animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177 The Chriſtian religion was introduced
771 into this country by the Ruſſians; but the
793 inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

22: Guillemard T,2 (1882) 1886 Kamchadal

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August; but each has its own time of arrival, which, from its constancy, appears to be more or less independent of seasonal influences. A few fish apparently remain at or about the river mouths during the summer, and eventually return to the sea, but these are so few as to be scarcely worthy of mention. The vast majority—practically all, in fact—ascend the streams to spawn, and having once done so, die. In the case of some species every fish appears to perish; in others, to which I shall refer, a few get back to the sea.

The kelts of these salmon exhibit, though in a far more intensified degree, the changes that are noticeable in our own salmon after spawning. The jaws are prolonged and hooked, and the teeth much developed. The back becomes somewhat humped—in one species enormously so—and the skin of that region so hypertrophied and spongy as to conceal the scales. Simultaneously the colour of the body surface changes, becoming livid or dusky, and blotched with red patches, or even entirely red. The flesh gets paler in colour and tasteless, and the whole aspect of the fish denotes its unfitness for food. As they ascend the river the salmon keep close together in large shoals, each fish keeping to the shoal of its own species and not mingling with others. Later in the year, after spawning-time, they of course become indiscriminately mixed.

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During our visit to, and journey through the country, we met with at least six different species of the Salmonidæ in abundance. That there were others I am quite sure, but in the following list I have limited myself to noticing those only about which we personally obtained information:—

1. *Oncorhynchus orientalis* (Pall.)—Known to the Kamschatkans as the Tchervitchi, this fish is the king of the Salmonidæ both as regards size and flavour. On first arrival the Tchervitchi is silvery, the back and upper surface dark, and marked with dark spots, which also extend on to the dorsal fin and tail. The fish may have a length of four feet or more, and are rather broad: their extreme

22: Guillemard T-2 (1882) 1886 Kamchadal

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weight was given by Afanasi as "over two poods," which would be 72 lbs. We did not see any fish of this size, but a salmon, most probably of this species, was caught by the *Dido's* men in 1855, the weight of which is given by Tronson as 76 lbs. There is no doubt that they commonly run to as much as fifty or sixty pounds. The Tchervitchi is proper to the Kamschatka and Okhotsk Seas, apparently not being found elsewhere. According to Steller, it only frequents the larger rivers, and does not exist to the north of the 56th parallel. He gives the date of its arrival as April 20th for the Kamschatka River, May 10th for the Bolchaia-reka, and June for the rivers in Avatcha Bay. According to Afanasi, it comes up the Kamschatka River "early in May," and gets out of season in July. It certainly appears, as far as we could learn from the natives, to wait for some days at the mouths of the rivers before ascending them, which it does in shoals so large that, as Pallas tells us,[1] a little wave of water is driven up in front of them.

We did not meet with the Tchervitchi until we got to the Kamschatka River in early September. The inhabitants had then long since ceased catching them, and very few remained in the river. The balagans and drying sheds were, however, full of them, and many seemed not to have been in quite clean condition at the time of catching. As a kelt, the fish becomes marked with red on the sides, producing a streaked appearance, and the rostrum becomes hooked, especially in the male, though apparently not nearly to the same extent as in the Garbusa and other species. From the time of entering the river the Tchervitchi is said by Pallas never to feed. We made no inquiries of the people as to this point, but they told us that a certain, though very small proportion of this species do not die, but manage eventually to regain the sea. The flesh is of a rather pale red in colour, and is esteemed by the natives above that of any other fish.

2. *Oncorhynchus lycaodon* (Pall.)—This salmon is known to

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 368.

22: Guillemard T-2 (1882) 1886 Kamchadal

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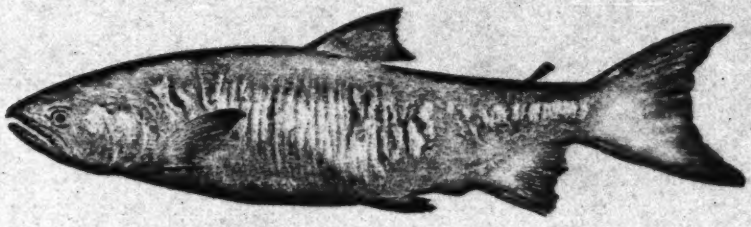
Kamschatkans[1] as the Krasnaya riba or red fish, but the name is invariably shortened to Krasna. In shape and general appearance it resembles our own salmon. On its first appearance in the rivers it is silvery, the belly white, the back dark with a bluish shade and almost without spots. In length it reaches three feet or more, and large examples would, I should think, scale over thirty pounds. It is found in the Okhotsk and Kamschatkan seas, and extends across to the American coast.[2] In the peninsula it seems to frequent large and small rivers alike, ascending the streams about the end of May or beginning of June, later than the Tchervitchi, but before



KELT OF HAIKO. (*Oncorhynchus lagocephalus.*)

the Haiko and Garbusa. Towards the end of August the Krasna is completely out of condition. It becomes a bright red all over like a gold fish, and both jaws get prolonged and hooked, while at the same time the teeth are wonderfully enlarged. None of the fish ever reach the sea after spawning—at least so we were informed by the natives;—and as this species is one of the most plentiful of all the Kamschatkan salmon, their bodies strew the banks in nearly as great numbers as the Garbusa.

3. *Oncorhynchus lagocephalus* (Pall.)—The trivial name of this fish is given by Steller[3] as Kaiko, but we found it invariably known as the Haiko. It is not unlike the preceding species (*O. lycaodon*),

[1] I have here and elsewhere used this term comprehensively as "an inhabitant of Kamschatka." It should not be confounded with Kamschatdale—the name applied to one of the original races inhabiting the peninsula

[2] Steller, "Beschreibung von dem Lande Kamtschatka."

[3] *Op. cit.* p. 157.

22: Guillemard T-2 (1882) 1886 Kamchadal

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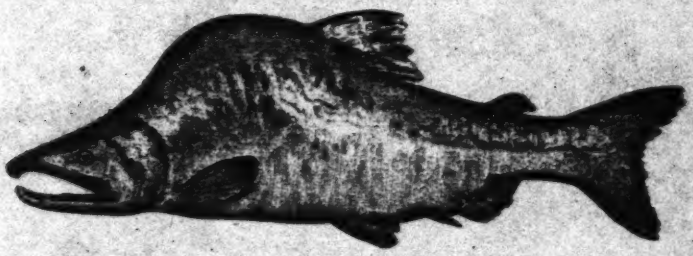
the back being dark greenish, the sides silvery, and the belly white, but it differs in the greater bluntness of the rostrum and the pale colour of the flesh. It appears, as a rule, to run smaller than the Krasna: its area of distribution is said to be similar. It arrives at the mouth of the Kamschatkan rivers some little time after the Krasna and Tchervitchi, but its advent coincides more or less with the Garbusa or Hump-backed Salmon. About mid-July[1] this species ascends the streams, and is caught in great numbers. Later, the kelts show much the same changes as those of the Krasna, the jaws becoming much hooked; but they never acquire the deep and



KELT OF GARBUSA. (*Oncorhynchus proteus.*)

generally-diffused red of the latter species, that colour being usually confined to small patches on the belly and under surface. A species of bread is said by Kittlitz and others to be made of the Haiko, but we did not see it.

4. *Oncorhynchus proteus* (Pall.) is known to the inhabitants of the country as the Garbusa or Hump-back. On arrival from the sea this fish is said to be without any trace of the extraordinary development of the back from which it takes its name. It is without spots, except upon the tail—which is deeply forked—and is very silvery. It is said to frequent the rivers of the Okhotsk Sea and those of some of the Aleutian Islands, as well as Kamschatka. Roughly speaking, its length is from eighteen to twenty-four inches,

[1] I have also got "mid-June" in my notes, but I think the date given above is probably the correct one.

22: Guillemard T-2 (1882) 1886 Kamchadal

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and its weight seldom above fifteen pounds. As a rule it is considerably less.

The Garbusa swims up the rivers in company with the Haiko, and is the most abundant of all the Salmonidæ in Kamschatka. According to Pallas, the hump begins to appear even before the fish has spawned, and is generally supposed by the natives to result from the efforts made in ascending the stream! Its enormous development in the kelts can best be realised by reference to the annexed illustration. Both jaws become hooked at the same time, more so, perhaps, than in any other species, and in consequence, in an old kipper the mouth does not nearly close. Until the death of the fish the gibbosity increases, and the colour of the body-surface becomes more and more livid and brown, the sides and under part being irregularly blotched with blood-red. The vast majority of this species die in the month of August, and though some few live till the middle of September, the natives told us that none return to the sea. The flavour of the flesh is said to be very good when the fish first come up the river, but the Garbusa is looked upon almost as the dogs' private property, and is not much eaten by the natives. In the balagans and drying sheds it invariably occupies the lowest tier of all. The female fish is described by Pallas as much smaller than the male, and very much less numerous; the hump does not become so largely developed and the mandibular hooks are absent or slight. We did not, however, meet with many individuals agreeing with this description.

5. *Oncorhynchus sanguinolentus* (Pall.) is the Kisutchi of the Kamschatkans. The clean fish is silvery, and devoid of red colouration, despite its specific name. The dark greenish-brown back is marked with rather large black spots, and the snout is blunt, becoming afterwards developed in a most peculiar manner. Pallas says that the largest measure three feet and weigh from ten to twelve pounds,[1] but it is evident that a fish of this length would weigh considerably more. Most of those that we saw towards the

[1] "Zoographia Rosso-Asiatica," vol. iii. p. 379.

22: Guillemard T-2 (1882) 1886 Kamchadal

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lower part of the Kamschatka averaged, I should think, about twelve or fifteen pounds; the extreme weights, at a rough guess, being eight and twenty-five pounds.

The Kisutchi is the last of all the salmon to ascend the rivers. It arrives about the 10th or 12th of August, and in consequence is in good condition when most of the other species are uneatable. In the middle of September we found the majority of them clean fish, and it is not till the following month that they usually acquire the blood-stained tinge of the under surface, and the extraordinary snout to which I have just alluded. The latter presents a smoothly rounded protrusion about as large as a sixpence, over-hanging the lower jaw, and giving the fish a very comical expression. We learnt from our two hunters that the Kisutchi were caught until November, and Krasheninikov tells us[1] that they are found "during the whole winter in those springs that run into the Kamschatka from the south," which is possibly due to the fact that the water of some of these streams is warm. It appears to be a generally-distributed species, occurring in all the rivers of the peninsula. The flesh is very pale, almost white.

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6. *Salmo callaris* (Pall.) is the Goletz or Gultsi of the natives. Krasheninikov says[2] that "the largest fish of this species, which lives sometimes five or six years, comes from the sea into the River Kamschatka, out of which it goes into the rivers that run into it, and by them to the lakes, where it grows almost as big as the *Chavitsi* (Tchervitchi), though it seldom weighs more than twenty pounds. They are found likewise very large in the Bistroy River; there their length is commonly twenty-eight inches, and breadth ten; they are of a dark colour,[3] have large teeth, and the lower jaw is crooked with a knob: it seems indeed of a different species. Those of three years old, which have been one year out of the sea, have a long head, are of a silver colour, with small scales, and

[1] "The History of Kamschatka," p. 148.

[2] *Op. cit.* p. 149.

[3] Steller also says, "auf dem Bauch und Flossen Zinnober-roth."

22: Guillemard T-2 (1882) 1886 Kamchadal

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small red spots; and such as have been two years out of the sea are round and longish, with small heads; and their flesh, which is reddish white, is hard and well tasted. With regard to their size, the first year they are long and small; the second they grow more in breadth than in length; the third the head grows considerably; and the fourth, fifth, and sixth years their breadth and thickness increases greatly: in the fourth year also the lower part to the snout becomes hooked."

Pallas adds that "these fish enter the rivers from the Eastern ocean in great numbers . . . in order to hybernate, being still without spots. They are said to remain torpid during the winter in the

GULTSI (*Salmo callarias.*)

depths of rivers, in shoals of thousands, until at the return of spring they seek the sea again, from about the 10th to the 20th of May. They surmount cataracts of whatever height by leaping, and in the same manner escape from nets one fathom deep. They force their way into the Kuril Lake near the River Kamschatka,[1] notwithstanding a very high cataract, and hybernate in it in large numbers. Many remain for a long time in the rivers and lakes, but the greater number return in spring to the sea. When they come up from the sea they are without the red tint and spots, and shine with a silvery lustre; during the ascent they become gradually spotted with red, while they acquire a more or less red tint beneath the belly and on the fins, according to the comparative rapidity of the river currents."

Both the above accounts are very difficult to reconcile with that

[1] It is difficult to understand what lake is here meant. The Kuril Lake is at least 170 miles distant from the nearest point of the Kamschatka River.

22: Guillemard T-2 (1882) 1886 Kamchadal

114 given us by the natives of this fish. In the first place the Gultsi,
136 as pointed out to us, was a long fish with somewhat rounded sides;
226 the under surface of a most beautiful salmon-colour, the body
825 marked with pink spots, and the back and upper surface dark greenish. The fish were in perfect condition, the coloration being evidently normal, and not due in any way to disease. To a piscatorial, though un-ichthyological eye they were Charr; a fish with which I was quite familiar in Lapland lakes and rivers,[1] but they differed in having the curious, upturned lower jaw to which I have already alluded.[2] The fish that Steller mentions, with their great breadth (depth) of ten inches, cannot well be of this species; and their migratory habits, and the fact that when they come from the sea they are "without the red tint and spots," is, I believe, opposed to what is as yet known of the life history of the Charrs. The natives distinctly told us that the Gultsi remains in the rivers throughout the year.

Two other species of salmon are mentioned by Steller as occurring in Kamschatka:—the Kundsha (*S. leucomænis*) and Mykysha (*S. purpuratus*), but we did not meet with either of them.

133 Late in the afternoon we arrived at some open grassy pools, the
136 head of a small affluent of the Kamschatka River. Mallard and teal were abundant, and having refilled our larder, we turned our attention to the numerous salmon that were splashing about in the shallow water. Whether owing to the fact that the stream was slightly warm or not I cannot say, but the majority of the fish were in better condition here than we had hitherto generally found them, and were in consequence less easy to gaff. After a few minutes' waiting we were, however, able to obtain our supper in the shape of two or three fine Kisutchi of from ten to fifteen pounds weight.
000 Salmon is never eaten to such perfection as in camp-life, where the interval between its death and digestion is reduced to a minimum;

[1] In some of the lakes in Lapland the Charr grows to a very large size. I have seen one which scaled over fourteen pounds.

[2] *Vid. ant.* p. 99.

24: Lansdell-639 [3] M-2 (1879) 1882 Kamchadal
116, 181, 533, 535, 825

" The Kamchatdales have not the heroic character of their neighbours the Koriaks. Their plaintive songs do not celebrate battles, but love, sledge travels, fishing, and hunting. In their dances they mimic admirably the movements of animals, bounding like the deer, running like the fox, and even entering the water to swim like the seal."

27: Sauer--299 T-2 (1789-93) 1802 Kamchadal
251, 825

"The oil extracted from herrings is very pellucid and sweet; it preserves birds' eggs all the year quite fresh and good, as does also the oil of seals, whales, &c."

27: Sauer--302 [2] T-2 (1789-93) 1802 Kamchadal
116, 133, 136, 777, 825

"Here are no lakes of any extent: the names of the principal ones are, Osernoi, about 40 miles from Cape Lopatka; Kronotskoi, 20 miles south-east of Tolbatshinski volcano; and another of less extent, situated about 40 miles north of Neizshni Kamtshatka, called Nerpitshi: the natives say that they are replete with fish; and tradition relates, that the fish of these lakes had two heads, or that they possessed legs; and, being sacred to some deity or demon, those who presumed to ensnare them were punished with misfortunes: some of the natives, however, seem to doubt the truth of this, while others still firmly believe it."

28: Sarytschew--66 T-1 (1789-90) 1806 Kamchadal
116, 535, 825

"I did not see the Kamtschadale dance here [CMC: at Bolsheretsk], but among the Kosaks of Petropaulowsk, who give it the preference, it is so indecent, that every modest woman would blush to be a spectator, much more a partner in it. A woman makes the commencement by stepping forward into the middle of the Isba, and holding a cloth spread out before her in a transverse direction. She shifts her feet slowly, making a variety of motions with her hands, head, and body. Her head sinks alternately on one shoulder or the other, on her back or on her breast. She then at length advances to a man, and renews this gesticulation close before him, which implies as much as soliciting his hand to the dance. He accordingly takes hold of the cloth in the same manner, and rising from his seat, they both commence the distortion of all their limbs together. The woman turns every now and then away from the man, but returns to him instantly again, sinking gradually upon her knees, and then bending herself backward with a similar gesticulation; the man also in the mean time falling down and reclining himselv over her, the dance is concluded with the most obscene gestures. While it lasts, both dancers and spectators all sing to one song, consisting of the words an-kelle, an-kaget, incessantly repeated: but they have a variety of such monotonous ditties, adapted to the same species of dancing. In some of their dances, they imitate birds and beasts; the man for example representing the male, and the woman the female-bear; and sometimes there is a company of these imitators, who amuse themselves together, either in running like partridges, gabbling like geese, or in aping some other animal."

28: Sarytschew--66-67 T-1 (1789-90) 1806 Kamchadal
116, 222, 262, 609, 825

"On our journey we experienced the most friendly treatment from the Kamtschadales, who not only entertained us with the utmost cordiality, but made us liberal presents of partridges, fresh fish, frozen keta, jukol, berries, and roots, [67] which are collected in great quantities from the mouse-holes, and form one of their principal aliments.

In autumn, they go into the fields in search of these roots, and as soon as they find hollow ground, by stamping, they dig down, and lay open the store-rooms of these animals. They do not, however, empty them entirely, but leave the mice a third at least of their provision, probably with a view of not driving away such useful creatures. They terrify each other, indeed, with the saying, that the mouse which is deprived of all its sustenance, will hang itself in despair on the next tree; a tale which may perhaps have originated in the circumstance of a mouse having been entangled by accident in the branches of a tree, and having hung there till it died."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-

273 ing; ſometimes they uſe a liquor made of a large muſhroon, with which the *Ruſſians* kill flies. This they prepare with the juice of epilobium, or *French* willow.

The firſt ſymptom of a man's being affected with this liquor is a trembling in all his joints, and in half an hour he begins to rave as if in a fever; and is either merry or melancholy mad, according to his peculiar conſtitution. Some jump, dance, and ſing; others weep, and are in terrible agonies, a ſmall hole appearing to them as a great pit, and a ſpoonful of water as a lake: but this is to be underſtood of thoſe who uſe it to exceſs; for taken in a ſmall quantity it raiſes their ſpirits, and makes them briſk, courageous, and chearful.

276 It is obſerved, whenever they have eaten of this plant, they
824 maintain that, whatever fooliſh things they did, they only obeyed
828 the commands of the muſhroon: however, the uſe of it is certainly ſo dangerous, that unleſs they were well looked after it would be the deſtruction of numbers of them. The *Kamtſchadales* do not much care to relate theſe drunken frolicks, and perhaps the continual uſe of it renders it leſs dangerous to them. One of our Coſſacks reſolved to eat of this muſhroon in order to ſurpriſe his comrades; and this he actually did, but it was with great difficulty they preſerved his life. Another of the inhabitants of *Kamtſchatka*, by the uſe of this muſhroon, imagined that he was upon the brink of hell ready to be thrown in, and that the muſhroon ordered him to fall upon his knees, and make a full confeſſion of all the ſins he could remember, which he did before a great number of his comrades, to their no ſmall diverſion. It is related, that a ſoldier of the garriſon having eaten a little of this muſhroon, walked a great way without any fatigue, but at laſt, having taken too great
276 a quantity, he died. My interpreter drank ſome of this juice without knowing of it, and became ſo mad, that it was with difficulty that we kept him from ripping open his

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is
looked upon by the *Kamtſchadales* as very diſhonourable for the
man, it was formerly difficult to find one to undertake it; ſo
that the poor widows were at a great loſs before our Coſſacks
came amongſt them; ſince which they have been in no want
of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may
marry his mother-in-law, and a father-in-law his daughter-in-
law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife:
in ſuch caſes the man immediately marries another wife, and
the woman accepts of another huſband, without any further
ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 831
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies.
Though theſe people are fond of women, yet they are not ſo
jealous as the *Koreki*. In their marriages they do not ſeem to
regard the marks of virginity. Nor are the women more
jealous; for two or three wives live with one huſband in
all harmony: even though he alſo keeps ſeveral concubines.
When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat
or a curtain made of nettles; but if they have no curtain, and
a ſtranger comes into the hut, they turn their face to the wall,
and continue their work. This is to be underſtood of thoſe that
retain their ancient barbarity; for ſeveral of them now begin
to be civilized to a certain degree, though all of them ſtill
preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4 Kamchadal RY3

XV. — CHARACTERISTICS OF KORYAK MYTHS

KK KI 773 171

The general features of Koryak mythology have been discussed in Chapter VII (pp. 115 et seq.). In general character the mythology of the Koryak, Kamchadal, and Chukchee shows many similarities.

Comparison with Kamchadal Mythology. — All that we know of the Kamchadal mythology from Steller,[1] and from the Kamchadal myths given in Chapter XIV, leads to the conclusion that the Koryak and the Kamchadal had one and the same folk-lore. Steller relates only two complex myths, — one containing the story of Kutq's adventures with the mice, and the other telling of his love-affair with Excrement-Woman. The former myth will also be found among the Kamchadal tales in this book,[2] and both tales occur among the Koryak myths.[3] Besides, when summing up the general characteristics of Kamchadal mythology, Steller says that the entire folk-lore of the Kamchadal consisted of indecent tales about their god Kutq (Raven), as Steller calls the founder of the Kamchadal world. In this respect Kamchadal mythology corresponds closely to that of the Koryak, and forms a clearly defined cycle, consisting exclusively of raven myths. It may therefore be stated without hesitation that whatever is true of Koryak folk-lore is just as true of that of the Kamchadal.

KK KI [831]

Steller also mentions three separate episodes from tales about Kutq which he had heard told. In the first of these episodes, Kutq's gluttony is described. He reaches a river, and sees the ground on the opposite bank covered with berries. Being unable to cross the river, he cuts off his own head, and throws it across, so that it may eat the berries.[4] The second episode, which is illustrative of the concupiscence of Kutq (who tried to have sexual intercourse with all objects that he met), relates that he once found a valved shell on the seashore, with which he had intercourse. The valves closed, and cut off his penis.[5] This calls to mind the tales about the vagina armed with teeth. The third episode, which reflects the coarse tendency of the Koryak imagination in general, tells how Kutq once took Chāchȳ (thus Steller calls Raven's wife) for an underground house, her vulva for the entrance-opening, and her anus for the underground passage of the ancient Kamchadal house, which was used for a draught.[6] He entered the house through the vulva, found the liver, and was about to take it, when it began to move. Then he became frightened, and ran out of the underground house.[7] In the Koryak tale, Big-Raven entered Miti''s anus as though it were the entrance to an underground house.[8]

[1] Steller, pp. 253-284. [2] Tale 131 (p. 329).
[3] Tales 88, 121, 130 (pp. 260, 316, 324). [4] Steller, p. 262. [5] Ibid., p. 263.
[6] See pp. 14, 53; Steller, p. 212. [7] Steller, p. 263. [8] Tale 25 (p. 169).

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

are taken away. This can only be done by ſome ſtranger's 587
firſt lying with her for once; but as this taking off of ſin is looked upon by the *Kamtſchadales* as very diſhonourable for the man, it was formerly difficult to find one to undertake it; ſo that the poor widows were at a great loſs before our Coſſacks came amongſt them; ſince which they have been in no want of ſtrangers to take away their ſins. Marriage is forbidden only 582
between father and daughter, mother and ſon; a ſon-in-law may marry his mother-in-law, and a father-in-law his daughter-in-law; and firſt couſins marry frequently. Their divorce is very 586
eaſy, conſiſting only in a man's ſeparating beds from his wife: in ſuch caſes the man immediately marries another wife, and the woman accepts of another huſband, without any further ceremony.

A *Kamtſchadale* hath two or three wives, with whom he lies 575
by turns. Sometimes he keeps them all in one hut, and ſome- 431
times they live in different huts. With every maid that he mar- 585
ries he is obliged to go through the above-mentioned ceremonies. Though theſe people are fond of women, yet they are not ſo jealous as the *Koreki*. In their marriages they do not ſeem to regard the marks of virginity. Nor are the women more jealous; for two or three wives live with one huſband in all harmony: even though he alſo keeps ſeveral concubines. When the women go out they cover their faces with a 834
ſort of veil; and if they meet any man upon the road, and 562
cannot go out of the way, they turn their backs to him, 177
and ſtand 'till he is paſſed. In their huts they ſit behind a mat or a curtain made of nettles; but if they have no curtain, and a ſtranger comes into the hut, they turn their face to the wall, and continue their work. This is to be underſtood of thoſe that retain their ancient barbarity; for ſeveral of them now begin to be civilized to a certain degree, though all of them ſtill preſerve a rude harſhneſs in their manner of ſpeaking.

CHAP

Koryak RY4
Kamchadal RY3
Chukchee RY2

C /242 cont./

582 171 835 The Chukchee marriage norms probably were the same as among the other nationalities of the same linguistic group as the Chukchee, namely, the Kamchadal and the Koryak. Concerning the Kamchadal, we have the testimony K 582 835 of Krasheninnikov in Opisanie zemli Kamchatki /A Description of Kamchatka/ (II, 169) that marriages were concluded, unhindered, between male and female cousins. As to the KK 582 835 C [835] Koryak, their norms were evidently /243/ under the strong influence of the Tungus peoples. Thus, while marriage to a niece was regarded as incestuous among the Chukchee, it was permitted among the Koryak. As among the Tungus, marriage simultaneously to two sisters is not allowed among them. KK 587 But the basic feature of Turanian marriage -- the obligation of marriage within one and the same clan -- has been perpetuated in the Koryak marriage in the institution of the sororate, or, as it is called by Iokhel'son, the double levirate. KK [171] [614] [177] As is well-known, the peculiarity of this institution, widespread even on the continent of North America (Algonkin, Thompson, Skidi, Pawnee), is expressed in the obligation of the widower to marry a woman from the clan of his deceased wife -- namely, a younger sister, cousin, or niece of the deceased (the last category -- nieces -- has evidently been adopted from the Tungus). Iokhel'son explains the origin of this institution by the desire to maintain religious ties that have been established between the spouses and by an unwillingness to admit an alien element to the sacred family hearth. Such an explanation could be very easily admitted, but then it is not understandable how the first, dead wife was admitted to the sacred hearth, especially since the Koryak have no knowledge of any kind of religious rituals like the KK 587 835 above-mentioned Chukchee ritual of administering the sacrament to the wife. On the other hand, this is explained much more simply by the institution of obligatory marriage. With the obligatory cousin-marriage, sisters and female cousins of one family belonged to the brothers and male cousins of another, and naturally, when the wife of a man

141

	Men		Women	
	Average	Stand. dev.	Average	Stand. dev.
Stature	1,597 mm.	5.4	1,495 mm.	4.6
Length of head	188 mm.	6.8	183 mm.	5.7
Width of head	149 mm.	5.7	144 mm.	4.8
Cephalic index	78.9	2.9	78.5	2.7
Width of face	144 mm.	5.7	137 mm.	4.3
Cephalic facial index	96.5	3.3	94.9	3.0

141 764 172 The Kamchadal, prior to embracing Christianity, threw away their dead to be devoured by dogs, and therefore no skeletal remains were found while excavating prehistoric sites. Only in one pit on the mouth of the River Kavran were prehistoric human bones discovered, and among them were two skulls in good condition for measurement.[1] One of the skulls seemed to be that of a woman, the other of a man. The length of skulls was 177 mm. and 188 mm., the width 136 mm. and 143 mm. and consequently the indices 76.9 mm. and 77.9 mm. According to Broca 2 units may be added to the cephalic index of skulls to obtain the cephalic of the living. Adding 2 units to 76.9 and 77.9 mm. we have 78.9 mm. and 79.9 mm., figures nearly equal to averages of the cephalic index of the present-day Kamchadal.

Plate 1 shows photographs of Kamchadal men, women and young girls. Plate 2, figure 1, represents elders of some villages of the western shore of Kamchatka.

SANITARY CONDITIONS AMONG THE KAMCHADAL

164 177 ● 836 732 The Russian conquerors have exercised a disintegrating influence on the family life of the Kamchadal. Among the Kamchadal, unchastity has been more or less common in the case of girls before marriage and of women after marriage. The Russians made liberal use of this custom and in this manner syphilis brought by them was widespread among the Kamchadal. This contagious illness resulted in different inherited diseases. In twenty-six villages of the western coast of Kamchatka, out of a population numbering 2,500, 250 people (i.e., 10 per cent) were, according to my census in 1911, cripples (blind, deaf-mute, humpbacked, lame persons and so forth); particularly were there many blind people, an average of 1 per cent, and half of the population was suffering from eye diseases. Plate 2, figure 2, shows a photograph of 11 blind men and women of the village Kharyusovo, which has 200 inhabitants; i. e., 5.5 per cent of the population are blind.

164 177 These observations refer to the year 1911 and it would be fair to relate observations of later years.

Dr. Shirokogoroff,[2] basing his statement on a recent (1919–1920) medico-statistical survey by Dr. Puxov who put his material at his disposal, says that some

[1] One skull was discovered on the Kuril Lake (see p. 62), but it was not in good condition for measurements.
[2] S. Shirokogoroff, *Northern Tungus Migrations in the Far-East*, The Journal, North China Branch, Royal Asiatic Society, vol. LVII, 1926, p. 174.

7:Lesseps T-3 (1787-88)1790 Kamchadal

177 The dancers of whom we ſpeak, have ſo
563 much vanity as to hold in contempt the ſongs and dances of the natives. The toilet of the women on theſe occaſions is an object of no trivial attention. They deck themſelves out in all their allurements, and whatever is moſt coſtly. Theſe ceremonious and ball dreſſes are principally of ſilks; and in the article of commerce we have already ſeen that they muſt be expen-
152 ſive. I ſhall finiſh this account with a re-
837 mark that I had occaſion to make, both in theſe aſſemblies and in thoſe of the Kamtſchadales; it is, that the majority of huſbands, Ruſſians as well as natives, are not ſuſceptible of jealouſy; they voluntarily ſhut their eyes upon the conduct of their wives, and are as docile as poſſible upon this chapter.

533 The entertainments and aſſemblies of the
535 native Kamtſchadales, at which I was alſo

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The women, as was mentioned above, who desire to have 842
children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having 847
children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs 842
and different conjurations to prevent conception. Their super- 847
stition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the 846
birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES.. 164 753

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines 757
consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

 certain

is only the richer ſort of people that uſe this brandy; and what 273
they ſell is only the firſt running, which makes a very good 356
dram.

Two pood of herbs[1] generally render one vedro * of the firſt 231
running, and the pood coſts four rubles or more. The herbs 273
that remain in the ſtill after drawing off all the ſpirit, are made uſe of as a yeſt, inſtead of berries, to ferment other infuſions or wort; and what they cannot uſe thus the cattle eat very greedily, and it fattens them much. It is remarkable that brandy diſtilled from the plants from which the ſkin has not been clean ſcraped, it cauſes melancholy and perturbation of mind. Mr *Steller* made 273
the following remarks upon this brandy: 1ſt, that it is very piercing, and contains a good deal of a ſharp acid, which coagulates the blood and makes it black: 2dly, that a ſmall quantity of it makes people drunk and quite ſenſeleſs, and cauſes their faces to turn black: 3dly, that if a perſon drinks a few drams of it, he is plagued the whole night with diſagreeable dreams, and next day is uneaſy and diſturbed as if terrified with the apprehenſion of the greateſt misfortune: and, what is very extraordinary, he has ſeen ſome people the day after they have been drunk with this ſpirit, from one draught of cold water, become again ſo drunk that they could not ſtand upon their feet. They wet their hair 751
with the juice, which they ſqueeze out of this herb in the 824
ſpring, as a preſervative againſt lice, and find it to be their only 842
relief. Many of the *Kamtſchadales*, who deſire to have children, will not eat this herb, green or dry, imagining that it impairs the generative faculties.

The herb kipri †, which grows in all *Europe* and *Aſia*, 137
has the third place in the food of the *Kamtſchadales*. They 262

* Vedro is a *Ruſſian* liquid meaſure containing 25 pints.

† Epilobium. LINN. Succ. Spec. 1. French willows.

1 [the sweet herb, sphondylium foliolis pinnatifidis Linn. Cliff.

boil

824 roll it[1] about their legs, and it ſerves for ſtockings. The wo-
291 men wrap it round their bodies, from an opinion that the
842 warmth promotes fruitfulneſs. It ſerves to light their fires,
782 being eaſily kindled. On great holidays they bind garlands of
372 it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

314 Few plants are of more general uſe than the nettles; for
283 being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed].

CHAP.

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

136
251

AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatkoi* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

[This chapter is a summary rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2.]

CHAP. XVII. [1]

163 *Of the* BIRTH *of their* CHILDREN.

IN general these people are not fruitful, for I could never learn that any one man had ten children by the same woman. Their women, as they say, have commonly very easy births: 844 *Steller* was present at the delivery of one of these women, who went out of the hut about her ordinary business, and in a quarter of an hour afterwards was carrying her child in her arms, without any change in her countenance. He likewise relates, that he saw another woman who was in labour three days, and to his great 843 surprise was at last happily delivered of a child, which came double, presenting the hips first. The conjurers attributed the occasion of this unnatural posture to the father, who in the time that the child ought to have been born was employed in making sledges, and bending the wood over his knee. Such ridiculous 844 causes do they assign for every uncommon effect. The women are delivered upon their knees, in presence of as many people as are in the village, without distinction of age or sex. They wipe the new-born child with tow, and tie the navel-string with thread made of nettles, and then cut it with a knife of flint: they throw the placenta to the dogs. They put chewed epilobium upon the navel, and wrap the infant in tow instead of swaddling cloaths: then every one caresses it, taking it in their arms, kissing it, and rejoicing with the parents. This is the only ceremony which they use. They can hardly be said to have professed midwives, and for the most part the mother or nearest relation performs the office.

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757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 757 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 844 278 The women uſe ſea raſberries ‡ to haſten their delivery; and alſo a ſort of coral, which they make into powder like crab-eyes, in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Impetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

7:Lesseps T-3 (1787-88)1790 Kamchadal

163
165
844

The women of this country have ſeldom more than ten children, the common eſtimate is four or five, they bear none after the age of forty. They aſſiſt one another in their deliveries, which are effected with great facility: meanwhile there are midwives in Kamtſchatka, but their number is very ſmall. The accidents which prove fatal to ſo many mothers, are much leſs frequent to theſe women, than inſtances of child-birth in the open air, in roads, or wherever their occupations call them. On

mountebanks. Similar in their impoſtures, their reign and their fall are ſimilar. Various reflections might be made on this ſubject. That a people equally ſimple and uninformed, like the Kamtſchadales, ſhould for a time have been the dupes of the impoſtures of their magicians, is not aſtoniſhing, and will admit of an excuſe: but that ſuch extreme ignorance and credulity ſhould be made ſenſible of their error, and bluſh at it, is a matter of ſurpriſe and congratulation; for even with the moſt enlightened nations of Europe, do not ſome kinds of chamans ſpring up every day, equally perfidious and deſtructive! They have all in the mean time their apoſtles, their proſelytes, and a prodigious number of martyrs.

7:Lesseps T-3 (1787-88)1790 Kamchadal

844/862 these occasions they make use of their hair, I am told, to tie the umbilical cord, carry home their children themselves, and immediately give them suck. They have no limited time for suckling their children, and I have seen instances of its continuing for four or five years. We may judge from this circumstance of the strong constitution of these women. It is observed, however, that Kamtschadales of either sex, do not live longer than Russians.

278/825 I forgot to mention a remedy to which the inhabitants of this peninsula have voluntary recourse in almost every disease: it is to a root called *bears root*, which they steep in brandy. The name sufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himself upon it when wounded, they imagined it to possess some healing quality, and this

252 boil it with their fish, and use the leaves as tea; but the greatest
262 use is made of its pith, which, after having split the stalks, they
273 scrape out with shells, and, tied up in bundles, dry it in the sun. It is then very pleasant, and in taste resembles dried *Persian* cucumbers. The *Kamtschadales* use it in several dishes, and serve it up green as a desert. The kipri boiled gives a thick sweet wort, that makes the best quasse * imaginable: it also affords them a very strong vinegar, if to six pounds of the kipri they add a pound of the sweet herb of sphondilium, and ferment it in the usual way: they get a great deal more brandy, when they use the infusion of the kipri, instead of water, to prepare the sweet herb for distillation.

278 They cure the navels of their children with this herb, chewing
137 it, and laying it upon the part. They grind the roots and stalks,
344 and use them instead of green tea, to which the flavour has some resemblance. The same use the *Kuriles* make of another shrub †, which has flowers like the strawberry, only yellow, and produces, no berries. This is called *Kurilskoy* tea, and has great virtue in fluxes and gripes.

222 The wild garlick ‖ is not only useful in the kitchen, but also
252 in medicine. Both the *Russians* and *Kamtschadales* gather great
262 quantities, which they cut and dry in the sun for their winter
757 provision; at which time boiling it in water they ferment it a little, and use it as an herb soup, which they call *shami*. They esteem the wild garlick so efficacious a remedy against the scurvy,
757 that they think themselves in no danger so soon as it begins to

* Quasse is a *Russian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no disagreeable drink.

† Potentilla caule fruticosa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

shew

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CHAP. XVIII.

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1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The women, as was mentioned above, who desire to have 842
children, for this purpose eat spiders. Some child-bed women, that they may the sooner conceive again, eat the navel-string of the child. There are others who have as great aversion to having 847
children, and procure abortions by different poisonous medicines, in which they are assisted by some knowing old women; but this can never be done, as it is well known, but at the hazard of their own lives. There are others, who are such unnatural wretches as to destroy their children when they are born, or throw them alive to the dogs. They use likewise several herbs 842
and different conjurations to prevent conception. Their super- 847
stition, also, is sometimes the occasion of great barbarity; for when a woman bears twins, one of them at least must be destroyed, and so must a child born in very stormy weather; though the last can be averted by some conjurations. After the 846
birth, the women, to recover their strength, make use of fish broth, made with an herb which they call *hale*; and then in a few days return to their ordinary diet.

CHAP. XVIII.

Of their DISEASES *and* REMEDIES.. 164 753

THE principal diseases in *Kamtschatka* are the scurvy, boils, palsy, cancer, jaundice, and the venereal distemper. These diseases they think are inflicted upon them by the spirits that inhabit some particular groves, if ignorantly they happen to cut any of them down. Their principal medicines 751
consist in charms and conjurations, but at the same time they do not neglect the use of herbs and roots. For the scurvy they use a

 certain

root of this plant, and the wounds which they give are incurable unless the poison be sucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and swells, and in two days the patient dies. The very largest whales when they have received a slight wound from such a poisoned weapon, cannot bear the sea for any considerable time; but throwing themselves upon the shore, expire most miserably, with terrible groans and bellowing. 137 278 411

The following are very serviceable for cloathing, and other household purposes. 137 285

There grows upon the sea-shore a whitish high plant, resembling wheat. I have seen it at *Strelinimuise*, the palace below *St. Petersbourg*, upon sandy ground. Of this they make mats, which serve them as coverings and curtains; the best of these are made of different colours, with the beards of the whales split very small and dyed. They also make clokes of it, like the old *Russian* milled clokes, smooth within, and rough without, which makes the rain run more easily off them. The prettiest of this kind of work is their little bags and baskets, in which the women keep their trinkets. These are so neat, that one would take them to be made of split canes; and they are ornamented with the hair of whales' beards and horse-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fish or different herbs and roots, which they provide against the winter: besides it serves also to thatch their houses or huts. They mow it with a scythe, made out of the shoulder-blade of a whale; which they whet so well by grinding it upon a stone, that they bring it to a very good edge. 314 286

In the marshes there is found a plant resembling the cyperoides. This they dress with a double-toothed comb of bone, and use it to wrap their children in instead of shirts or swaddling cloaths, to keep them clean and sweet. They also roll 137 314 287 854

006 We have said before that the Ainos were not acquainted with navigation, coming to the islands on rafts. Later they learned to build clumsy boats from the Japanese—not from the Indonesians, who are expert navigators; neither did they adopt the skin boat from the Chukchee and Koryak. As to shape, their dug-outs and boats do not resemble the canoes of the Kamchadal.

Figures 69–74 show objects found in 1889 by Dr. Taril in a neolithic site on the island Shumushir.
Fig. 69. Fragment of a bone comb ornamented with interwoven curves, resembling one of the decoration of the Kamchadal bone belt buckle of Plate 16, figure 2.
Fig. 70. Bone comb resembling the Kamchadal comb of Plate 16, figure 2. I am inclined to regard them both as implements for making decorative parallel lines when the clay is still wet. It may be that they served both objects: as hair combs and implements for decoration of pottery.
Fig. 71. Fragment of a bone comb with broken-off teeth.
Fig. 72. Half of bone belt buckle. The decorating interwoven curves are much larger than on the preceding buckles, both Kamchadal and Kurilian. Five drilled holes along the broken edge were intended, as it seems, to bind together the two broken halves.
Fig. 73. Bone buckle of smaller size, ornamented by irregular circles and straight lines.
Fig. 74. Bone case for fishing hooks.

177 While the Ainos had adopted nothing from the East-Siberian tribes as far
854 as concerns navigation, they made some cultural acquisitions from the Kamchadal or were influenced by them in some respects. The Kurilians weave grass baskets of the same kind and material and in the same manner as the Kamchadal do. The same is true of wooden utensils. On the other hand the Kamchadal adopted from the Kurilians the mode of manufacture of bone combs, belt buckles and ornamental motives. The Aino as well as the Kamchadal women use the head-band for carrying children on the back.[1]

1. [For additional culture traits shared by the Ainu and Kamchadal see category 171--Analyst]

7:Lesseps T-3 (1787-88)1790 Kamchadal

291 they have a deer ſkin girt, which ſerves as a
854 faſh. The women carry their children on their back by means of a ſtring, which paſſes round the forehead of the mother and under the buttocks of the child.

171 The toyon of Karagui, at whoſe houſe we
622 lodged, was an old rebel. It was with ſome difficulty he had been brought back to his duty, and he gave us ſome uneaſineſs by his poſitive refuſal to procure us fiſh.

The manners of the inhabitants of this oſtrog are very ſimilar to thoſe of the neighbouring Koriacs. This analogy is as conſpicuous in their idiom as in the dreſs of their children. I had an opportunity of remarking it the day after our arrival.

Underſtanding that there were two hordes of rein deer Koriacs at no great diſtance, we ſent immediately a meſſenger to them to

requeſt

353 corner of the apartment * a wretched image of ſome ſaint, ſhining with greaſe and blackened with ſmoke. It is before theſe images that the Kamtſchadales bow them-
352 ſelves, and offer their prayers. The reſt of
415 the furniture conſiſts of ſeats and ſome veſ-
356 ſels, made either of wood, or the bark of
511 trees. Their cookery utenſils are of copper or iron; but they are all diſguſtingly filthy. The remains of their dried fiſh are ſcattered about the room, and the women or the children are continually broiling pieces of ſalmon ſkin, which is one of their favourite meats.

171 The ſingularity of the children's dreſs
291 particularly attracted my attention; it is
854 ſaid exactly to reſemble that of the Koriacs. It conſiſts of only one garment, that is, of a

* This nook is in a manner diſtinct from the room, and is leſs filthy, becauſe it is leſs frequented. It is a place of honour ſet apart for ſtrangers.

ſingle

291
824
854

ſingle deer ſkin, that covers and ſits cloſe to every part of the body, ſo that the children ſeem to be entirely ſewed up. An opening at the bottom, before and behind, affords an opportunity of cleaning them. This opening is covered with another piece of ſkin, which may be faſtened and lifted up at pleaſure; it ſupports a tuft of moſs *, placed like a clout between the legs of the child, and which is renewed as often as it becomes neceſſary. Beſides the common ſleeves, there are two others hanging to the garment to place the arms of the child in when it is cold; the extremities are ſewed up, and the ſleeves lined on the inſide with moſs. There is alſo a hood fitted to it, made of the ſame materials as the reſt of the dreſs; but in yourts the heads of the children are almoſt always bare, and the hood hangs therefore upon their ſhoulders. Beſide all this,

* They make uſe of the herb called *tonnchitcha* for the ſame purpoſe.

they

7:Lesseps T-3 (1787-88)1790 Kamchadal

844 these occasions they make use of their hair,
862 I am told, to tie the umbilical cord, carry home their children themselves, and immediately give them suck. They have no limited time for suckling their children, and I have seen instances of its continuing for four or five years. We may judge from this circumstance of the strong constitution of these women. It is observed, however, that Kamtschadales of either sex, do not live longer than Russians.

278 I forgot to mention a remedy to which
825 the inhabitants of this peninsula have voluntary recourse in almost every disease: it is to a root called *bears root*, which they steep in brandy. The name sufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himself upon it when wounded, they imagined it to possess some healing quality, and this

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

578 his limbs contracted. They never have any disputes about their land or their huts, every one having land and water more than sufficient for his wants.

186 177 Although their manner of living be most nasty, and their actions most stupid, yet they think themselves the happiest people in the world, and look upon the *Russians* who are settled among them with contempt: however this notion begins to change at present; for the old people who are confirmed in their customs, drop off, and the young ones being converted to the Christian religion, adopt the customs of the *Russians*, and despise the barbarity and superstition of their ancestors.

622 794 871 177 In every *Ostrog*, or large village, by order of her Imperial Majesty, is appointed a chief who is sole judge in all causes, except those of life and death; and not only these chiefs, but even the common people, have their chapels for publick worship. Schools are also erected in almost every village to which the *Kamtschadales* send their children with great pleasure: by this means it is to be hoped, that their barbarity will be in a short time rooted out.

CHAP.

29:Cochrane T-2(1821-22)1824 Kamchadal

231 overflowing of the rivers. My reason is, that no enclosure is to be found upon the land side, but only on the borders of the rivers, and small streams, and there they are perfect; and we are generally informed that the Kamtchatdales possessed no other domestic animals than dogs.

Before entirely closing these remarks respecting Kamtchatka, and its grievances, I may just advert
563 to one or two points not hitherto dwelt on. The
793 children of the natives receive no education, and
871 the children of the Russians but little more. There
R certainly is a school existing in St. Peter and St.
177 Paul's, governed by a priest, and regular school-
.87 master; but one is a great rogue, and the other a greater sot. The sum allowed for the maintenance of each child is, I believe, five pounds per annum, scarcely enough to buy clothing, and were it not for the abundance of fish caught, and some assistance from their families, I really do not see
563 how the boys could be kept alive. Of the clerical
793 gentlemen themselves, I may observe, that they
R maintain a great distinction between practice and
177 precept. They are very numerous: I know not what
.79 so many do in so poor a place, there being no congregations to employ so great a number. The revenue received by these reverend gentlemen is far from inconsiderable, and although it is done under the disguise of voluntary contribution, still it presses heavy upon the people; and heavier still when it is considered that they do little work of any kind be-

When they march on foot it is remarkable that two never go a-breast, but follow one another in the same path, which by use becomes very deep and narrow; so that it is almost impossible for one that is not used to it to walk therein, for these people always set one foot strait before the other in walking.[1] 481

[Chapters XI-XIV of this source are a summary (and a distorted one) rather than an actual translation of the original Russian. For a complete translation see Kamchadal Source 2]

CHAP. XI.

The Opinions of the Kamtschadales *concerning* God, *the Formation of the World, and other Articles of Religion.* 776

THE *Kamtschadales*, like other barbarous nations, have no notions of a deity, but what are absurd, ridiculous, and shocking to a humanized mind. They call their god *Kutchu*, but they pay him no religious worship, and the only use they make of his name is to divert themselves with it; they relate such scandalous stories of him as one would be ashamed to repeat. Amongst other things they reproach him with having made so many steep hills, so many small and rapid rivers, so much rain, and so many storms; and in all the troubles that happen to them upbraid and blaspheme him.

They place a pillar upon a large wide plain, which they bind round with rags. Whenever they pass this pillar they throw a piece of fish or some other victuals to it; and near it they never gather any berries, or kill any beasts or birds. This offering they think preserves their lives, which otherwise would be shortened: however, they offer nothing which can be of use to themselves, but only the fins and tails of the fish, or such things as they would be obliged to throw away. In this all these people of *Asia* agree, offering only such things as are useless to themselves. 228 782 886